

ARISTOTLE UNIVERSITY OF THESSALONIKI

School of Physics

Internal regulation of the Program of Postgraduate Studies: Physics of Atmospheric Environment and Global Changes

(according to the regulations of the Law No 4957/2022)

26 February 2024

Approved by the AUTH Senate (3142/29-11-2023)

General Provisions

The second cycle of studies consists of following a Program of Postgraduate Studies (PPS) leading to a Master of Science Diploma (M.Sc.).

The present Graduate Studies Regulation complements the provisions of Chapter IX [Organization and Operation of Second and Third Cycle Study Programs] of Law 4957/2022 (Government Gazette 141/t.A'/21-7-2022): "New Horizons at the Higher Education Institutions: Strengthening of the quality, functionality, and connection with society and other provisions", as well as the Regulation for the Operation of the Programs of Postgraduate Studies of the Aristotle University of Thessaloniki (AUTh).

> Article 1 Subject - Purpose of the PPS

The School of Physics of the Faculty of Sciences, AUTh, organizes and operates a PPS entitled: «Physics of Atmospheric Environment and Global Changes».

The **subject** of the PPS is the operation of a postgraduate educational program with emphasis to the training and the specialization in the scientific fields of the Physics of the Atmospheric Environment, Atmospheric Physics, Global Atmospheric and Climate Changes, Environmental Management, as well as to the training and the specialization in the contemporary research methodology and management of environmental problems in local, regional and global scale, with the use of contemporary infrastructure and the technical know-how of the School of Physics of AUTH.

The **purpose** of the PPS is the training of qualified environmental physicists, specialized in several fields regarding basic and applied research, the protection and management of the atmospheric environment, the study, management, and handling of the global environmental changes. The PPS graduates will be able to respond to the needs of the modern labor market in several fields such as: Earth Observation, Climate Change, Quality of the Atmospheric Environment and Environmental Changes, as well as to the planning and development of applications and services with the use of tools and methodologies about the Management of the Environmental Information, with aim to deal with the current and future environmental problems.

The learning outcomes and the qualifications of those who will successfully attend the PPS, focus on the graduates' specialization in the research and the management of environmental problems, such as:

- air pollution in local and global scale,
- global changes and climate,
- environmental data analysis,
- measurements of environmental parameters,

- writing of Environmental Impact Assessments,
- specialization in atmospheric models and databases,
- learning of programming languages and technical software,
- development of environmental management and informatics applications,
- development of environmental applications and services based on satellite remote sensing,
- development of management tools about the climate change,
- improvement of the graduates' skills on the organization and management of environmental research and consulting projects.

Article 2

Awarded Postgraduate Title

The PPS awards a Master of Science Diploma (M.Sc.) with title: **«Physics of Atmospheric Environment and Global Changes»**.

The successful completion of the PPS leads to level seven (7) of the National and European Qualifications Framework in accordance with the article 47 of Law 4763/2020 (A'254).

Article 3

Governing Bodies of the PPS

Competent governing Bodies for the administration, organization and operation of PPS are:

- **I.** *The Senate of the University* which is responsible for the academic, administrative, and organizational matters of the PPS, and exerts all responsibilities related to the PPS not assigned to other bodies by the law.
- **II.** *The Postgraduate Studies Committee* which is established by decision of the Senate and consists of the relevant vice Chancellor, who serves as Chair, as well as one (1) member of the Teaching and Research Academic Staff (DEP) from each Faculty of AUTH, and from one (1) member who comes from the categories of members of Special Educational Staff (EEP), Laboratory Teaching Staff (EDIP) and the Special Technical Laboratory Staff (ETEP) of AUTH. The members of the Committee are experienced in organizing and participating in postgraduate programs. The Committee's term of office is two (2) academic years.
- III. The School of Physics Assembly, has the following responsibilities:
 - a. constitutes Committees for the evaluation of the applications of postgraduate candidate students and approves their enrollment to the PPS,
 - b. assigns the teaching work to the teaching staff of the PPS,

- c. proposes to the Senate the amendments on the establishment decision of the PPS, as well as the extension of the PPS duration of operation,
- d. constitutes examination committees for the examination of the Diploma thesis of the postgraduate students and determines the supervisor of each thesis,
- e. ascertains the successful completion of studies, in order to award the MSc Diploma of the PPS,
- f. approves the annual report of the PPS, following the recommendation of the Coordinating Committee (C.C.).

By the decision of the School of Physics Assembly, the responsibilities of paragraphs a) and d) may be transferred to the Coordinating Committee (C.C.) of the PPS.

- IV. The Coordinating Committee (C.C.) of the PPS consists of the Director of the PPS and four (4) Teaching and Research Academic Staff members of the School who have a related scientific field to that of the PPS and undertake teaching work at the PPS. The members of the C.C. are appointed by decision of the School Assembly and have the following responsibilities:
 - a. prepares the initial annual budget of the PPS and its modifications, providing the PPS has resources according to the article 84 of the Law 4957/2022, and proposes its approval to the Special Account for Research Funds (ELKE) of AUTH,
 - b. prepares the report of the PPS and proposes its approval to the School Assembly,
 - c. approves the expenditure of the PPS,
 - d. approves the granting of scholarships, remunerative or non-remunerative, in accordance with the provisions of the founding decision of the PPS and the Regulation of Postgraduate and PhD Studies,
 - e. proposes to the School Assembly the distribution and assignment of the teaching work to the teaching staff categories of the article 83 of the Law 4957/2022,
 - f. proposes to the School Assembly the invitation of Visitor Professors to cover of teaching needs of the PPS,
 - g. charts a plan for the modification of the curriculum, which is then submitted to the School Assembly,
 - h. proposes to the School Assembly the redistribution of courses between academic semesters, as well as issues related to the quality improvement of the curriculum.

Emeriti Professors of the School or from collaborating Departments/Schools may participate in the C.C., as long as they provide teaching work to the PPS.

V. The Director of the PPS, who comes from the Teaching and Research Academic Staff members of the School, by priority at the rank of Professor or Associate Professor, and is appointed by decision of the School Assembly for a two-year term, with the possibility of renewal without limitation, and is not entitled to additional compensation for his/her administrative work.

The Director has the responsibilities foreseen in the article 82 paragraph 4 of the Law 4957/2022 and any other responsibilities determined by the founding decision of the PPS:

- a. presides over the C.C., prepares the agenda and convenes its meetings,
- b. proposes the issues for discussion about the organization and the function of the PPS to the School Assembly,
- c. proposes to the C.C. and to other governing bodies of the PPS and the University issues about the efficient operation of the PPS,
- d. is the Scientific Responsible of the PPS according to the article 234 of the Law 4957/2022 and exercises the corresponding powers,
- e. monitors the implementation of the decisions of the PPS governing bodies and of the Internal Regulation of the Postgraduate Programs and PhD Studies, as well as the implementation of the PPS budget.

The Director of the PPS and the members of the C.C. are not entitled to any compensation for the pursuance of the responsibilities assigned to them.

The Secretarial Support of the PPS is provided from the School of Physics. The Secretariat of the PPS is responsible for maintaining postgraduate student files and grades. In addition, informs the postgraduate students for issues related to the organization and the operation of the PPS. Finally, it is responsible for the preparation of the topics introduced to the School of Physics Assembly.

Article 4

Categories of the Postrgraduate course candidates

Applicants to the PPS must be holders of first -cycle degrees from Greek or foreign Universities. Foreign academic degrees must be recognized by the Hellenic National Academic Recognition and Information Center (DOATAP) according to the article 304 of the Law 4957/2022. Specifically, applicants may be:

- 1. Graduates from (a) Schools of Sciences, (b) Schools of Engineering, (c) Schools of Agriculture, Forestry and Natural Environment, and (d) Schools of Environment.
- 2. Graduates from the Hellenic Air Force Academy.
- 3. Graduates from Greek and foreign Universities, with a curriculum and an academic subject relevant or partly relevant to the one of the PPS, according to the annual invitation for applications of the PPS, which is published to the websites of the School of Physics and the PPS.

The recognition of non-Greek undergraduate degrees for admission to a PPS is conducted by the Academic Schools. In case where the first cycle of studies has been completed abroad, the candidate is not obliged to provide the equivalence of academic degrees from the Hellenic National Academic Recognition and Information Center (DOATAP). Even if the candidate presents the degree parity, the recognition is still conducted by the School.

The Academic Schools are responsible **only for the academic recognition of the degrees** and not the equivalence. DOATAP is still responsible for the equivalence of degrees.

The applicants who have already applied or are enrolled to a PPS, subject to the provision of an individual act of recognition by DOATAP, are exempted from this obligation and their application or the continuation of their studies is considered based on the criteria of the new law.

Method for checking the authenticity of a general type first-cycle degree:

- **1.** the authenticity is certified by:
 - 1.1. the Hague Apostille,
 - **1.2.** the submission of the degree and the simultaneous notification of the foreign University by the interested party. The notification is accompanied by an official email from the foreign University giving the Secretariat of the relevant Academic School the ability to check the authenticity,
- 2. in case the specialization awarded by the degree is needed, the check is based on its inscription on the degree and the transcript of records or the Diploma Supplement,
- **3.** in case the grade of the degree is of interest, the procedure announced by the Hellenic National Academic Recognition and Information Center is used,
- 4. the academic recognition applies only to this specific process, is secured by a decision of the School Assembly and <u>is not provided to the applicant</u>. If the applicant requires a relevant certificate, he/she must address the Hellenic National Academic Recognition and Information Center for Equivalence.

Article 5

Number of Entrants, Criteria and Entrant Selection Procedure

The maximum yearly number of admissions to the PPS is ten (10) students. The PPS cannot operate with less than three (3) postgraduate students.

Following the decision of the School Assembly, the PPS announces the new positions with an open procedure. In particular, the invitation states the requirements of attendance, the number of the attendees, the categories of the candidates, the attendance procedure, the criteria of selection, etc., the deadlines for the application submission and the required supporting documents are referred. In addition, the required exams based on the undergraduate studies of the candidates, the syllabus of the courses, the dates of the exams, the grading procedure and their contribution to the points of the candidates are referred, as well.

The invitation (announcement) for the admission of postgraduate students is published to the websites of the School and the PPS. The applications, accompanied by the necessary supporting documents, are submitted to the Secretariat of the School, either in paper or digital form, as it is determined by the invitation.

The selection criteria of the attendees are:

1. The grade of the undergraduate studies degree or diploma, either from a Greek or foreign University, which must be equal to or greater than 6/10.

- **2.** The degree acquisition time, compared to the minimum required time that is determined by the University's curriculum.
- 3. The grades in the undergraduate courses relevant to the scientific field of the PPS.
- **4.** Performance in the Graduate Thesis (related to the academic subject of the PSP), where this is required in the first cycle of studies.
- 5. The sufficient knowledge of a foreign language, as a necessary requirement, in a level which is determined by the School Assembly and can be proven with a certificate of "good" (Level B2) or "very good" (Level C1) or "excellent" (Level C2) knowledge of English, according to the Council of Europe, which it is accepted by the Supreme Personnel Selection Board (<u>ASEP</u>). As an alternative, a Bachelor's or a Master's degree from a Greek or a foreign University can be submitted, from which the successful completion of an English-speaking undergraduate or postgraduate program is confirmed. The candidates that do not hold valid certificates of good knowledge of the English language (at least Level B2, according to the Council of Europe, which it is accepted by ASEP), are required to participate to an examination of their ability to easily translate scientific documents, which is carried out by the School of Physics during the period of entrance examinations, which follows the application period. Foreigner candidates, as a requirement to attend the PPS, are obligated to submit a certificate which proves the sufficient knowledge of Greek or at least a Level of a B2 certificate. The same applies to foreign candidates who, if they do not hold valid certificates of good knowledge of the Greek language, are required to attend an examination on their ability to understand Greek language sufficiently.
- **6.** Letters of recommendation (the minimum number of letters and the procedure of their submission is stated in the annual invitation for applications).
- **7.** Additional supporting documents, if available, are submitted following the instructions of the annual invitation for applications:
 - a. Interview from the Selection and Examination Committee
 - b. Master's degrees or Diplomas from Greek or foreign Universities.
 - c. PhD from a Greek or foreign University.
 - d. Work experience.
 - e. Scientific research experience.
 - **f.** Documents to prove any research or scientific writing activity, attendance to educational exchange programs.
 - g. Knowledge of any additional foreign languages.

The <u>selection process of the applicants</u>, by decision of the School Assembly, is carried out by a competent three-member Selection and Examination Committee, consisting of members of the Teaching and Research Academic Staff (DEP), the Special Educational Staff (EEP), the Laboratory Teaching Staff (EDIP) or the Special Technical Laboratory Staff (ETEP), who have undertaken teaching work at the PPS.

The Committee prepares a complete list of all candidates and then, after verification, rejects those who do not meet the minimum criteria set by the School, and invites for an interview, when required, the eligible candidates who have met the prerequisites.

The **<u>scoring</u>** of candidates for admission to the PPS results as follows:

- 1. Grade of first-cycle Degree or diploma (up to 35 points)
- 2. Time of acquisition the degree relative to the minimum required time (up to 10 points)
- 3. Grades in undergraduate courses relevant to the PPS (up to 30 points)
- **4.** Grade of the Graduate thesis (related to the scientific field of the PPS), where required or foreseen in the undergraduate studies (up to 15 points)
- **5.** Other qualifications, such as recommendation letters, publications, other degrees, relevant professional experience, interview by the Three-Member Selection and Examination Committee, etc. (up to 10 points)

Personal interviews may be requested from candidates when the Selection and Examination Committee deems that there is insufficient material to reach a decision. The invitation of candidates to an interview is done via email, to the email address they have provided with their application. The interview fields typically include plans for the candidates' future, basic questions about their professional/academic path so far, etc.

In addition to the scoring based on the above criteria, in cases of candidates who are graduates of Departments or Schools according to Article 4, whose curriculum does not include courses related to the academic subject of the PPS, or for cases of candidates who are graduates of Departments or Schools of related academic subject that are not explicitly mentioned in the invitation for applications, the three-member Selection and Examination Committee is responsible for assessing the adequacy of the relevance of their studies. Candidates who judged to be graduates of inadequately relevant Departments or Schools are required to participate in examinations of courses specified by the School Assembly and are mentioned in the invitation for applications.

In the aforementioned case of candidates from inadequately related Departments or Schools of graduation, special examinations are conducted in the following three undergraduate courses:

- Applied Mathematics II (Differential Equations) (compulsory course of the 3rd semester of the undergraduate program of the School of Physics)
- Theoretical Mechanics (compulsory course of the 4th semester of the undergraduate program of the School of Physics)
- Atmospheric and Environmental Physics (compulsory course of the 3rd semester of the undergraduate program of the School of Physics)

These courses are indicative and may be subject to change by decision of the Assembly, which also determines the examination material and is announced in the annual invitation for applications. The examinations are supervised by the instructors of the undergraduate courses of the School of Physics. These special examinations constitute an early stage in the admission process. Only in the case of success (grades above the passing grade in all 3 courses), the candidate is considered eligible along with the rest of the candidates.

Upon completion of the evaluation process of the candidates' applications, and according to the required documents and the prescribed scoring, the three-member Committee **ranks** the candidates in descending order of scores. Candidates must accumulate a minimum of twenty (20) points to be considered eligible or runners-up. If two or more candidates are tied for the last place in the eligibility ranking, the selection is based on the grade of the first-cycle of studies Degree, and at a second level

(if necessary), based on the duration of the candidates' studies relative to the minimum required duration of studies for obtaining the degree.

Based on the ranking order, candidates are also designated as **runners-up**, the number of which amounts up to 50% of the maximum number of admitted candidates rounded-up to the nearest integer. In cases where admission positions remain vacant, they are filled until the exhaustion of the planned number of admissions (according to the provisions of the invitation for applications), either through the ranking of the successful candidates in descending order of total score, given that it is at least twenty (20) points, or through a supplementary invitation for applications for the vacant positions.

The **final list** of successful candidates and any runners-up, after the approval of the School Assembly, is posted on the bulletin board of the Secretariat and on the website of the PPS.

Objections to the results may be submitted within five (5) working days from the announcement of the results.

The **registration** of the successful candidates takes place after a relevant announcement on the School of Physics website and within a time frame specified by the School's Secretariat.

In case a candidate does not register within the specified period, their non-response is considered a refusal of acceptance of the position, which is then filled by the next successful candidate.

Article 6 Duration and Terms of Study

The minimum duration of studies in the PPS that leads to the award of the MSc Diploma is set to three (3) semesters, including the time required for the preparation and evaluation of the postgraduate diploma thesis.

The maximum allowable completion time for the studies is set to twice the normal duration of study.

Part-time studies are provided for postgraduate students, the duration of which cannot exceed twice the normal duration of studies, i.e., six (6) semesters. Part-time studies are provided for those who are proven to work at least twenty (20) hours per week and for non-working postgraduate students who cannot meet the minimum requirements of the "full-time" program and for exceptionally serious cases, such as illness, workload, serious family reasons, military service, force majeure, for which the School Assembly decides, after the submission of the required supporting documents justifying the reasons for which part-time studies are requested.

Additionally, postgraduate students who have not exceeded the normal duration of studies may be granted, upon submission of a relevant application, a **suspension of studies**, which may not exceed two (2) consecutive semesters. During the suspension, the postgraduate student loses the student status. The duration of the suspension is not counted towards the maximum duration of normal studies. A suspension of one year can also be granted to part-time students.

Upon resumption of studies, postgraduate students return to a state of normal studies with all the rights and obligations provided by the PPS.

Furthermore, upon justified request before the completion of the normal duration of studies, postgraduate students may apply for an **extension of studies** concerning the completion of studies or the preparation of the Diploma thesis. The Coordinating Committee submits the request for the extension to the School Assembly, which approves or rejects the requested extension of studies. In case the postgraduate student has not completed the studies after the end of the extension period, they are deregistered from the PPS by decision of the School Assembly.

Applications of postgraduate students for **part-time studies**, **suspension**, **or extension of studies** are submitted to the School of Physics Secretariat before the start of the academic semesters. The case of military service is automatically recognized by law as a suspension of studies.

For the successful completion of the PPS and the award of the MSc Diploma, the successful examination in the courses, as defined by the detailed PPS curriculum, the successful examination of the MSc thesis, and the completion of at least ninety (90) credits (ECTS) are required.

The School of Physics Assembly has the authority to de-register a postgraduate student for the following reasons:

- a. Upon request of the postgraduate student.
- b. If the maximum duration of study elapses and the studies are not completed.
- c. If the postgraduate student does not complete 30 % of the required credits (ECTS) for obtaining the diploma within the regular duration of studies.
- d. For inappropriate academic behavior. This case is examined by the School Assembly upon a request and reasoned recommendation of the Coordinating Committee of the PPS. After consideration of the opinion of the Ethics Committee of the Institution, the School Assembly may de-register the postgraduate student from the PPS. Specifically, in the case of plagiarism, article 15 of this regulation is applies.

No tuition fees are predicted for the enrollment to the PPS.

Article 7 Student Rights and Obligations

Postgraduate students have all the rights, benefits, and facilities provided to undergraduate students, except for the right to the provision of free textbooks. The School must ensure facilities for postgraduate students with disabilities or special educational needs, such as special examination methods, access to educational facilities, teaching laboratories, etc.

Postgraduate students admitted to the PPS are obliged to:

- Regularly and continuously attend all courses of the current curriculum. Attendance to classes and exercises is mandatory. Exceptions are allowed only for serious, justified reasons. To consider that the attendance of each course is successfully completed, students must attend at least 70% of the teaching hours of each course.
- 2. Submit their assignments/tasks within the requested deadlines in each course.
- 3. Participate in all educational and research activities of the PPS.

- 4. Attend the examinations.
- 5. Submit the course registration forms within requested deadlines every semester.
- 6. Offer remunerative work, where it is foreseen (tutoring sessions, contribution to the library and research, and where necessary to the University's services), if they have received a scholarship.
- 7. Submit to the Secretariat a signed statement that their Diploma thesis does not contain plagiarism, before its evaluation.
- 8. Submit on time the evaluation questionnaires of the PPS as well as any other questionnaire concerning the operation of the PPS that may be requested from them.
- 9. Have settled all their obligations to the University before the graduation ceremony. Otherwise, they will not have the right to take the oath and/or receive the postgraduate diploma.
- 10. Respect and comply with the decisions of the governing bodies of the PPS, as well as academic ethics. Failure to comply with the above, without documented justification, may lead to failure in a course or exclusion from the PPS.

Article 8 Curriculum – Knowledge Assessment

The PPS is structured in three (3) semesters.

- In the 1st semester, four (4) compulsory courses and one (1) elective course are taught, that correspond to 30 ECTS in total.
- In the 2nd semester, five (5) elective courses are taught, that correspond to 30 ECTS in total.
- In the 3rd semester, the Master thesis is completed (30 ECTS).

The official language of the program is Greek, and the language of writing the MSc thesis can be either Greek or English. In the case of foreign lecturers or foreign students, courses can be conducted in English. Notes and bibliography can also be provided in English.

A) Indicative curriculum

| | 1st Semester (Total ECTS 30) | | | | |
|--|--|---|--------------------|------|--|
| (Four Compulsory courses. The students choose one of the available elective courses) | | | | | |
| No. | Course Title | Type of Course (Compulsory/ Elective) | Remote Learning | ECTS | |
| 1 | Atmospheric Physics and Global Changes | C | | 7 | |
| 2 | Quality of the Atmospheric Environment | С | | 7 | |
| 3 | Environmental Management and Circular Economy | C | | 6 | |
| 4 | Environmental Data Analysis Methods | С | | 6 | |
| 5 | 1 elective (Basic or Special) | E | | 4 | |

| 2nd Semester (Total ECTS 30) (The students choose five of the available elective courses) | | | | | |
|--|------------------|---|--------------------|------|--|
| No. | Course Title | Type of Course (Compulsory/ Elective) | Remote Learning | ECTS | |
| 1 | Basic elective | E | | 9 | |
| 2 | Basic elective | E | | 9 | |
| 3 | Special elective | E | | 4 | |
| 4 | Special elective | E | | 4 | |
| 5 | Special elective | E | | 4 | |
| 3rd Semester (Total ECTS 30) | | | | | |
| No. | Course Title | Type of Course (Compulsory/ Elective) | Remote Learning | ECTS | |
| 1 | Master thesis | С | | 30 | |

Basic Elective Courses

| No. | Course | ECTS | Remote Learning |
|-----|--|------|-----------------|
| 1 | Atmospheric Radiation and Remote Sensing | 9 | 15% |
| 2 | Atmospheric Measurements | 9 | |
| 3 | Air Quality Models | 9 | 30% |
| 4 | Environmental Impact Assessment and Evaluation Tools | 9 | |

Special Elective Courses

| No. | Special Elective Course | ECTS | Remote Learning |
|-----|---|------|-----------------|
| 1 | Laboratory and Field project | 4 | |
| 2 | Radiation Transfer Models | 4 | |
| 3 | Atmospheric Aerosols | 4 | |
| 4 | Atmospheric Circulation Models | 4 | |
| 5 | Development of Environmental Information Services | 4 | |
| 6 | Statistical Analysis of Timeseries | 4 | |
| 7 | Chemistry of Atmospheric Environment | 4 | |
| 8 | Biogeochemical Cycles | 4 | |

For courses where remote learning is foreseen, the prerequisites will be met according to the provisions set forth in the Ministerial Decision (Hellenic Government Gazette 1079/Tb/28-2-2023).

The start and end dates of the courses, as well as the duration of the examination periods, are determined by the School Assembly upon recommendation from the PPS Coordinating Committee.

B) Knowledge Assessment - Student Evaluation

The evaluation of postgraduate students is exclusively conducted by the teaching staff of the PPS. Assessment in individual courses will be done through written or oral examinations, assignments, or a combination thereof. The evaluation method is defined by the instructor of each course at the beginning of the academic semester. Grades may be sent to the School Secretariat within two weeks after the end of the examination period of each semester. Grades are submitted with one decimal digit. In September, an examination period is scheduled for all courses of the academic year.

The grading scale for evaluating the performance of postgraduate students is defined from zero (0) to ten (10), as follows:

- Excellent (8.5 to 10)
- Very Good (6.5 to 8.5 excluding)
- Good (6 to 6.5 excluding)

The passing grade is six (6) and above.

Attendance on courses or any other educational activity is mandatory. A postgraduate student is considered to have attended a course (and thus has the right to participate in the exams) only if the student has attended at least 70% of the course hours. Otherwise, the postgraduate student is required to attend the course again in the following academic year.

Examinations may be conducted either in person or online or using certified electronic applications in case of emergencies or force majeure, provided the integrity of the assessment process is ensured.

In cases of illness, the instructor is recommended to facilitate, in any way they deem appropriate, the student's examination (e.g., oral, or remote examination).

If a postgraduate student fails an examination of one or more courses in both the regular examination period and the September examination period, the student has the option to retake the course (provided that the student has not exceeded the maximum duration of studies) or request from the Coordinating Committee of the PPS a re-examination. The Coordinating Committee appoints a three-member committee consisting of faculty members of the School with expertise relevant to the course to be re-examined. The instructor responsible for the examination is excluded from this committee. Re-examination of the MSc thesis is not provided by the above procedure.

The grade of the MSc Diploma results from the weighted average of the courses of the PPS and the MSc thesis (the weighting is done by the ECTS credits of the courses and the MSc thesis), calculated with accuracy of the second decimal digit, as follows:

The grade of each course and the MSc thesis (where provided) is multiplied by the corresponding number of ECTS, and the sum of these products is divided by the minimum number of ECTS required for the MSc Degree, which is 90.

The mathematical formula is as follows:

MSc Diploma Grade = (Grade of Course 1 X ECTS of Course 1 + Grade of Course 2 X ECTS of Course 2 + ...+ Grade of MSc thesis X ECTS of MSc thesis) / Total number of ECTS.

C) Master's thesis

For the completion of the graduation thesis (MSc thesis), the Coordinating Committee, upon application of the candidate within specified dates, which includes the proposed title of the MSc thesis, the proposed supervisor, and an abstract of the proposed work, appoints the supervisor and forms a three-member Examination Committee for the approval of the thesis, one member of which is the supervisor.

The right to supervise MSc theses is held by the teaching staff of the categories, as described in article 83 of Law 4957/2022:

- a. Members of the Teaching and Research Staff (DEP), Special Education Personnel (EEP), Laboratory Teaching Staff (EDIP), and Special Technical Laboratory Staff (ETEP) of the School or other Schools of the same or another Higher Education Institutions (HEI) or Higher Military Education Institutions (HMEI), with additional employment beyond their legal obligations, if the PPS has tuition fees,
- b. Professors Emeritus or retired members of the Teaching and Research Staff of the School or other Schools of the same or another HEI,
- c. collaborating professors,
- d. appointed instructors,
- e. visiting professors or visiting researchers,
- f. researchers and specialized operational scientists of research and technological bodies according to article 13A of Law 4310/2014 (Hellenic Government Gazette A' 258) or other research centers and institutes of the country or abroad.

The members of the three-member Examination Committee must have the same or related scientific expertise as the subject of the PPS.

The preparation of the MSc thesis is governed by the **Code of Academic Ethics of the Aristotle University of Thessaloniki**. Every creator or co-creator of any intellectual work is entitled to be referred to and recognized as such, enjoying both the property and moral rights/powers arising from the specific work. Exceptionally, if the original intellectual product ("work") is the final output of a paid research project, which has been assigned by an entity outside the Aristotle University of Thessaloniki, the property rights of the creator or co-creators may be limited based on the terms of the contract assigning the said research work, while the moral rights remain with the creator or creators, subject to the necessary contractual restrictions for the exploitation/financial utilization of the produced intellectual creation.

The writing of the MSc thesis can be done **in Greek or English**. If the thesis is written in English, an extensive summary in Greek describing the methodology and the main results of the work should be included in the text. Upon the final submission of the MSc thesis, the institution, department, and PPS where it was completed, the supervisor, and the members of the examination committee with their respective titles should be mentioned on the first pages of the document. For the writing of the thesis, fonts such as Calibri, Times New Roman, or Arial should be used, with a font size of 12 for the body of

the text and 16 or 14 for the titles of sections/subsections. The line spacing of the body text should be 1.15 lines, and the text alignment should be justified. The length of the thesis should not be less than 50 pages, including references and the table of contents. A template and detailed writing instructions for the thesis will be available on the PPS website.

A positive recommendation of the three-member Examination Committee is required for the **defense** of the MSc thesis. The MSc thesis is defended before the three-member Examination Committee on a date and at a place determined by the said Committee and approved by the PPS Director. The defense is public, announced at least three (3) days in advance on the website of the PPS, and all the teaching staff of the PPS are informed by the PPS Director.

After the defense of the MSc thesis, minutes are drafted indicating the individual grade of each member of the Three-Member Examination Committee, the average grade, as well as any comments or remarks. The MSc thesis is approved if it is graded with a grade greater than or equal to six (6/10).

Upon approval by the Committee, the MSc thesis is mandatorily posted on the website of the PPS.

If the evaluation of the MSc thesis is negative (grade less than 6), the postgraduate student must make corrections and additions according to the indications of the Examination Committee and defend it orally again before the same Committee or, if there are objective reasons, by replacing the members of the Coordinating Committee that are unable to attend. The second defense must be made no later than six months after the initial defense.

If the second assessment is also negative, the postgraduate student loses the right to be awarded the MSc Degree.

In exceptional cases, if there is an objective inability or significant reason, the replacement of the supervisor or member of the three-member Examination Committee and a change in the topic of the MSc thesis are possible after decision of the School Assembly.

Article 9

Scholarships

In cases where financial support is available, the PPS can provide scholarships to up to two (2) postgraduate students per year, in the amount of 1.250 euros each, by decision of the School Assembly after a proposition by the Coordinating Committee of the PPS. The scholarships can be granted based on:

- a. academic criteria and concern full-time postgraduate students who have succeeded in all courses of the previous semesters and the average grade of the previous semester is taken into account,
- b. the offer of services to the PPS (grading of papers, supervision in examinations, support to computing and student laboratories, etc.)

More specific granting requirements, the obligations and the rights of the scholarship holders may be determined by a decision of the School Assembly.

The scholarships must be registered in the approved budget of the PPS.

The Aristotle University of Thessaloniki may grant remunerative scholarships to postgraduate students with the obligation to support the educational process and provide auxiliary teaching work. The PPS determines the maximum amount of the grant of a remunerative scholarship per student, the maximum number of hours of their weekly employment and other details regarding the granting of the scholarships. Postgraduate students are informed following a relevant announcement from the School's Secretariat.

Article 10

Teaching Staff

The teaching work of PPS is assigned, following a proposal from the Coordinating Committee of the PPS and by decision of the School Assembly, to the following categories of teaching staff:

- a. Members of the Teaching and Research Staff (DEP), Special Teaching Personnel (EEP), Laboratory Teaching Staff (EDIP), and Special Technical Laboratory Staff (ETEP) of the School or other Schools of the same or another Higher Education Institutions (HEI) or Higher Military Education Institution (HMEI), with additional employment beyond their legal obligations, if the PPS has tuition fees,
- b. Professors Emeritus or retired members of the Teaching and Research Staff of the School or other Schools of the same or another HEI,
- c. collaborating professors,
- d. appointed instructors,
- e. visiting professors or visiting researchers,
- f. researchers and specialized operational scientists of research and technological bodies according to article 13A of law 4310/2014 (Hellenic Government Gazette A' 258) or other research centers and institutes of the country or abroad.
- g. Esteemed scientists of recognized expertise who have specialized knowledge and relevant experience in the scientific subject of the PPS.

The decisions of the School Assembly on the distribution of the teaching work must include the following elements:

- a. the full name of the teaching staff member,
- b. his/her property /teaching status,
- c. the type of teaching work assigned per teacher (course, seminar), and
- d. the number of teaching hours per course or seminar.

It is the invited teacher's obligation to adhere to the weekly teaching schedule, as determined by the Coordinating Committee, and to follow the examination and evaluation conditions, as described in the present Regulation.

Teaching staff' obligations include, among others, the description of the course or lectures, the provision of relevant literature, the method of examination of the course, and communication with postgraduate students.

Teaching at the PPS is done in accordance with the course timetable drawn up by responsibility of the Director of PPS.

At the beginning of the PPS attendance, a permanent Teaching and Research Staff member (DEP) is appointed for each postgraduate student of the PPS as **Academic Advisor**. The role of the Academic Advisor is to monitor the academic progress of the students, to be informed by the teaching staff of any continuous absences of students under their responsibility, and to inform them (through the Secretariat) that such an absence may result to the failure in the course. In addition, the Academic Advisor aids in the selection of the MSc thesis subject, taking into account the research interests of the graduate student. Postgraduate students are obliged to contact their academic advisor for any problem that may affect the smooth progress of their studies.

The Academic Advisor provides the postgraduate student with the necessary counseling to cope with the requirements of the PPS.

The Academic Advisor makes sure to meet with the postgraduate students he has taken over at regular intervals and not less than two (2) times per semester. His/Her duties include, among others:

- Identifying the postgraduate student's needs and research interests, supporting the postgraduate student's inclinations and skills, and encouraging him/her to work towards areas that suit him/her best.
- Facilitating the provision of information and fostering communication between postgraduate students and the collective bodies within the PPS. and the administrative services.
- The provision of assistance for the preparation of his/her individual six-month study program and the determination of the subject of the MSc thesis.
- Identifying students who have outstanding obligations for multiple courses.
- Providing care and strategic planning for these students.

The teaching staff, administrative staff, as well as the relevant services of the University cooperate and support the Academic Advisors in their work, while considering information, observations, suggestions and requests, for any deficiencies or malfunctions that create problems for the students and any suggestions for dealing with them.

Following the respective proposal from the Coordinating Committee of the PPS or from the Director, an assisting teaching work may be assigned to Ph.D. students of the School or Faculty, under the supervision of a PPS teaching staff member. Assisting work is defined as the assistance of Teaching and Research Staff members (DEP) in the exercise of their teaching duties, the training of students, the conduct of tutorials, laboratory exercises, the supervision of exams and the grading of exercises. By decision of the School Assembly, assisting work may either be assigned, or a Call for Interest may be published on subjects offered in the PPS curriculum. The Call for Interest sets the deadlines for submitting candidacy and specifies the required qualifications.

The teaching staff, during the period they are on educational leave or suspension of duties, may provide teaching work to the PPS, if they judge that their schedule allows it, provided of course that based on the current conditions this is essentially and practically feasible, a matter which must be competently judged on a case-by-case basis.

Programs Revenue-Financial Management Process

The resources of the Program of the Postgraduate Studies may come from:

- a. donations, sponsorships and all kinds of financial support,
- b. legacies,
- c. resources from research projects or programs, especially of the European Union,
- d. AUTh's own resources,
- e. any other legal source.

The PPS prepares, in accordance with the current legislation, a detailed budget for the five (5) years of operation, which includes all resources of the program and its operating costs.

Article 12

Administrative Support - Logistics Infrastructure

For the proper functioning of the PPS, the School of Physics provides the venues (rooms and laboratories) where the academic activities of the PPS are carried out. The Departments of the School, to which the PPS teaching staff are members of, owe to assist the PPS with provision of classrooms, or venues for presentations or laboratory courses.

The administrative and secretarial support of P.P.S. is done by the Faculty of Physics Administration Office, which provides administrative support to the P.P.S. about

- a. the annual announcement for admission to the P.P.S.,
- b. the collection of applicants' applications and supporting documents, c. the admissions records,
- d. the score entries,
- e. the initialization of postgraduate students' applications and their promotion to the Director of the P.P.S. and/or the Chair of the Department,
- g. the study completion check, the issuance of the Diploma and the Diploma Supplement and
- f. in particular matters which are determined by decisions of the Assembly of the Department.

Article 13

Graduation Ceremony

The graduation ceremony is not an integral part of the successful completion of the studies, but it is a necessary condition for the granting the title document of the diploma. The graduation ceremony is

takes place during a meeting of the School Assembly, in the presence of the Director of the PPS, the Head of the School or his/her Deputy and, if possible, possibly a representative of the Rector.

Postgraduate students, who have successfully completed the PPS, in exceptional cases (studies, residence or work abroad, health reasons, etc.), can apply to the School Secretariat for an exemption from the obligation to attend the graduation ceremony.

Article 14

Awarded Type of Postgraduate Study Diploma (MSc Diploma)

The MSc Diploma title is a public document and is awarded by the PPSs of the School.

The MSc Diploma is issued by the Secretariat of the School of Physics. The Diploma shall state the Schools or the Departments or the Institutions participating in the organization of the PPS, and any emblems of the Institutions, the date of completion of the studies, the date of issuance of the MSc Diploma, the graduation protocol number, the title of the PPS, the details of the postgraduate student and the designation rating Good, Very Good, Excellent.

Before the awarding of the Diploma. and after the successful completion of the PPS, the graduate may be granted a certificate of successful attendance and completion of the Program.

In addition to the MSc Diploma, a Diploma Supplement is granted [article 15 of Law 3374/2005 and of the Ministerial Decision F5/89656/BE/13-8-2007 (Hellenic Government Gazette 1466 T.B')], which is an explanatory document that provides information about the nature, level, general framework of education, the content and status of the studies which have been successfully completed and is not a substitute for the official degree or course grade list provided by the Institutions.

Article 15

Plagiarism

By submitting any coursework or thesis, the postgraduate student is required to indicate whether he has used the work and views of others.

Plagiarism is considered serious academic misconduct. Plagiarism is the copying of another's work, as well as the use of another's work - published or unpublished - without proper citation. The quoting of any documentary material, even from studies by the postgraduate student himself, without a relevant reference, may justify a decision of the School's Assembly for his/her expulsion from the program.

In the above cases - and after a reasoned recommendation from the supervising professor - the School Assembly may decide to expel the postgraduate student.

Any misconduct or violation of academic ethics is referred to the Coordinating Committee of PPS for evaluation and recommendation to address the problem at the School Assembly level. The offenses of copying or plagiarism and, in general, any violation of the provisions on intellectual property by a

postgraduate student when writing assignments in the context of courses or preparing a postgraduate MSc thesis are also considered infringements.

The University's Ethics Committee is responsible for violations of ethics rules and studies quality.

Article 16 Certification - Evaluation of the PPS

After the issuance of the establishment decision of the PPS and before the start of its operation, the certification by the Hellenic Authority for Higher Education (HAHE) is required, according to case c) of paragraph 1 of article 8 of the Law 4653/2020 (A' 12). After their establishment, postgraduate programs periodically certified, according to the sub-case bb) of case b) of paragraph 1 of article 8 of the Law 4653/2020, in the context of the evaluation of the academic unit to which they belong.

Any amendments to the founding decision necessitate re-certification of the PPS by the HAHE, especially if the amendment concerns elements such as the program's subject, its objectives, its learning outcomes and qualifications obtained by its successful attendance, as well as the specializations that award a different diploma.

The PPSs of each School, including inter-departmental, inter-institutional, and joint programs, who's the School undertakes the administrative support, are evaluated in the context of the periodic certification of the academic units by the HAHE. In this context, the overall assessment of the work carried out by each PPS is evaluated, including the degree of fulfillment of the goals set at its establishment, its sustainability, the absorption of graduates by the labor market, the degree of its contribution to research, its internal evaluation by the postgraduate students, the feasibility of extending its operation, as well as other elements regarding the quality of the work produced and its contribution to the national strategy for higher education.

If a PPS fails to meet the criteria for continuing its operation during its evaluation stage, then its operation is terminated with upon graduation of the already enrolled students in accordance with the establishment decision and the regulation of postgraduate and doctoral study programs.

QAU Internal Evaluation

In order to ensure and improve the quality of the PPS the Quality Assurance Unit of AUTh (QAU) conducts a periodic internal evaluation of the PPS within the framework of the Institute's Internal Quality Assurance System and in accordance with the guidelines of the HAHE.

Στις υποχρεώσεις των Οργάνων Διοίκησης και των διδασκόντων του Π.Μ.Σ. εμπίπτουν και όλες οι διαδικασίες που προβλέπονται, βάσει των εκάστοτε οδηγιών και κατευθύνσεων της ΜΟ.ΔΙ.Π.-Α.Π.Θ. για την εσωτερική και εξωτερική αξιολόγηση και πιστοποίηση των Προγραμμάτων Σπουδών και των ακαδημαϊκών Μονάδων.

The obligations of the Administrative Bodies and teaching staff of the PPS also include all the procedures foreseen, based on the respective instructions and directions of QAU-AUTh for the internal and external evaluation and certification of Study Programs and academic Units.

Evaluation of teaching staff and courses by the students

With the sole purpose of improving the level of studies of the PPS and with absolute assurance of their anonymity, students are invited to evaluate the courses and teaching staff of each semester.

For reasons of uniform observance of statistical data and the possibility of extracting useful conclusions for the educational work of the Schools and the University as a whole, the evaluation questionnaires are drawn up by the QAU and can be partially differentiated, based on the particular characteristics and needs of each academic unit and/or each course. The questionnaires are completed electronically.

The assessment is carried out under the responsibility of the Internal Evaluation Group (OMEA) of the School in collaboration with the QAU of AUTh, and is carried out utilizing University's Informational Quality Management System (QMS). The School's administration and OMEA must take systematic actions to ensure student participation in the assessment, following directives of the QAU and the relevant decisions of the Senate.

The OMEA of each School monitors, through the Quality Management Information System (QMS) of QAU, the level of the student involvement in the evaluation process, analyzes the relevant results and informs the Administrative Bodies of the PPS and the corresponding academic unit. The evaluation questionnaires concern each taught course and each teaching staff member individually.

The administrative bodies of the PPS and the academic unit, in collaboration with the corresponding OMEA, are responsible for reviewing evaluation results, announcing their conclusions, deciding on the publication of summary results of the evaluation, when deemed necessary and, in any case, after the announcement of the semester courses' grades, in accordance with the current Legislation for the protection of Personal Data, and taking actions to address any identified problems.

Article 17

Study Guide

The PPS releases a Study Guide to provide information to postgraduate students regarding its operation. The Study Guide comprises:

- **1.** The governing bodies of the P.P.S.
- 2. Comprehensive information and useful electronic resources (website hyperlinks) of the University and the School, detailing administrative services or collective Bodies accessible to postgraduate students for academic support.
- **3.** The goal, objectives, and expected learning outcomes conferred upon completion of the studies within the PPS and the award of the MSc Diploma.
- **4.** The academic calendar, encompassing semester of the start and end dates of the academic semesters, the examination periods, holidays, MSc thesis presentation schedules, and any additional obligations like internships, seminars, conferences, etc.
- **5.** The PPS Curriculum, the credit units allocation, the teaching staff details, and the rights and obligations of postgraduate students.
- 6. The official language of teaching and thesis preparation for postgraduate studies.

- 7. Specific points of the PPS regulations along with a hyperlink to access the full texts.
- **8.** Services available to postgraduate students and their responsibilities during the registration process.
- **9.** Contact directory of the PPS teaching staff, including email addresses and telephone numbers for communication purposes.

Article 18

Transitional provisions

Any future issues that are not addressed by the pertinent legislation or the Postgraduate Studies Regulation will be resolved through decisions made by governing bodies, with a modification of the Regulation.