### Organizational and Operational Regulations of the Doctoral School of Physics

Act CCIV of 2011 on National Higher Education (hereinafter referred to as Nftv.), Government Decree 87/2015 (IV.9.) on the implementation of certain provisions of the Nftv. and Government Decree 387/2012. (XII. 19.) on doctoral schools, doctoral procedures and habilitation, as well as the relevant legislation in force, the Doctoral Regulations of the University of Pécs, the decisions of the Hungarian Accreditation Committee (hereinafter referred to as HAC, in Hungarian: Magyar Akkreditációs Bizottság – MAB) and the Hungarian Doctoral Council (hereinafter referred to as HDC, in Hungarian: Országos Doktori Tanács - ODT), the Doctoral Council of Natural Sciences (hereinafter referred to as the Doctoral Council) hereby establishes the following regulations (hereinafter referred to as the Regulations) for the organization and operation of the Doctoral School of Physics (hereinafter referred to as the Doctoral School):

### Scope of the Regulations

**Section 1** (1) The scope of the Regulations extends to the Doctoral School and, within the Doctoral School, to:

- a) lecturers and researchers participating in doctoral training and the doctoral degree award procedure,
- b) employees responsible for the administration of doctoral training and academic affairs (hereinafter referred to as doctoral administration),
- c) students participating in doctoral training (hereinafter referred to as PhD students or students), individual preparation PhD candidates, PhD candidates, and predoctors,
- d) applicants submitting applications for admission to doctoral training.

## **Legal status of the Doctoral School**

Section 2 (1) The name of the Doctoral School is: Pécsi Tudományegyetem Fizika Doktori Iskola

- (2) The name of the Doctoral School in English: Doctoral School of Physics
- (3) The seat of the Doctoral School is: PTE Institute of Physics, 7624, Pécs, Ifjúság útja 6.
- (4) The languages of doctoral training and degree awarding at the Doctoral School are Hungarian and English.
- (5) Identification number of the Doctoral School: D172
- (6) The Doctoral School provides accredited doctoral training in the field of natural sciences, researching and teaching topics related to this field, specifically the physical sciences.
- (7) At least seven core members are required for the operation of the Doctoral School. More than half of the core members must hold the title of full professor. A person may only be a core member of one doctoral school at a time.

### Tasks and scope of authority of the Doctoral School

# **Section 3** (1) The Doctoral School has:

- a) the joint right to make proposals concerning doctoral training and the conferment of doctoral degrees,
- b) the right to provide doctoral training, which includes the right to participate in examinations and to deliver educational activities,
- c) the right and obligation to develop its own operational regulations,
- d) the right to appoint members to the University Doctoral Council (hereinafter UDC, in Hungarian: Egyetemi Doktori Tanács EDT) and the Doctoral Council,
- e) the right to conduct the admission procedure for doctoral training,
- f) the right to determine the language proficiency requirements referred to the Doctoral School by higher regulations,
- g) the right to define subject groups or doctoral programs (hereinafter collectively referred to as doctoral programs) within their field of research.

### The Head of the Doctoral School and the directors of doctoral programmes

- **Section 4** (1) The Head of the Doctoral School may be a full-time employed core member of the University of Pécs (hereinafter referred to as the University) with an academic degree and the title of Doctor of the Hungarian Academy of Sciences, who has outstanding professional recognition.
- (2) The Head of the Doctoral School shall be elected by the UDC from among the core members of the Doctoral School on the basis of the opinion of the majority of the core members and appointed by the rector for a maximum term of five years. The appointment may be extended several times.
- (3) The Head of the Doctoral School
- a) coordinates the professional activities of the Doctoral School,
- b) directs the activities of the Doctoral School Council and is responsible for the implementation of the decisions taken by the Doctoral School Council,
- c) represents the Doctoral School,
- d) makes proposals to the Doctoral Council for the development of the Doctoral School,
- e) decides on applications submitted by students for reduction of tuition fees or deferral of payment,
- f) sets the annual objectives of the Doctoral School,
- g) decides on all other matters that university regulations refer to them.
- (4) The appointment of the Head of the Doctoral School shall terminate:
- a) upon expiry of the term of appointment,
- b) upon reaching the age of seventy,

- c) upon revocation,
- d) upon resignation,
- e) upon termination of employment with the University,
- f) upon the death of the head.
- (5) The rector may revoke the appointment of the Head of the Doctoral School after consulting the UDC if the Head of the Doctoral School fails to perform the tasks specified in paragraph (3) adequately or if he or she is prevented from performing his or her duties for at least six months. The Doctoral School Council, the Doctoral Council and the UDC may propose the revocation of the appointment.
- (6) Pursuant to Section 4 (4) of the University Doctoral Regulations, the Doctoral School shall establish doctoral programmes within its research fields. The purpose of these programmes is to ensure the coherent management of related research topics, the coordination of supervisors and doctoral candidates, as well as the fulfilment of quality assurance tasks.
- a) Programme Directors may only be core members of the Doctoral School accredited by the Hungarian Accreditation Committee (MAB).
- b) The content and designation of the doctoral programmes shall be proposed by the Head of the Doctoral School, in consultation with the relevant leaders and the FizDIT, for the approval of the Doctoral Council.
- c) All research topics announced by supervisors shall be assigned to one of the doctoral programmes.
- d) The Programme Director shall monitor the work of the doctoral candidates concerned, and, upon completion of the training and research programme, shall decide jointly with the Head of the Doctoral School on the recommendation of the supervisor on the issuance of the pre-degree certificate (absolutorium).

The current doctoral programmes of the Doctoral School and the names of their directors are set out in the Training Plan.

#### The Doctoral School Council

**Section 5** (1) The Doctoral School shall establish a body to assist the head of the school, called the Doctoral School Council (hereinafter referred to as the Doctoral School Council), whose members shall be elected by a simple majority of the core members of the Doctoral School. The Doctoral School Council shall consist of eight members.

- (2) The members of the Doctoral School Council shall be:
  - a) the Head of the Doctoral School,
  - b) the core members,
  - c) the directors of doctoral programmes.
- (3) Permanent invitees with the right to participate in discussions (without voting rights) to the Council:
  - a) a representative of the PhD student council,
  - b) the secretary of the Doctoral School.
- (4) The Chair of the Doctoral School Council is the Head of the Doctoral School. The chair is assisted in his or her work by a secretary appointed by the chair.

- (5) The tasks and scope of authority of the Doctoral School Council are as follows:
- a) drafts the rules of procedure governing its organization and operation, which shall be approved by the Doctoral Council,
- b) prepares the Quality Assurance Plan and Quality Policy of the Doctoral School with the involvement of the parties concerned, which are approved by the Doctoral Council,
- c) decides on the appointment of the Doctoral School's teachers and supervisors, who are approved by the Doctoral Council, based on the recommendation of the Head of the Doctoral School,
- d) makes proposals for the Doctoral School's Curriculum and the doctoral programs launched within it, which are approved by the Doctoral Council,
- e) approves the announcement of topics and doctoral topics,
- f) proposes the requirements of the complex examination, which are decided by the Doctoral Council,
- g) makes proposals to the UDC for the election of members of the Doctoral Council,
- h) makes proposals to the Doctoral Council, upon the recommendation of the chair, for the appointment of the members of the doctoral Admission Committee, the comprehensive examination committee, the review committee and the official reviewers, and for the establishment of the comprehensive examination committee and the complex examination committee,
- i) determines the amount of the tuition fees and other fees related to the training,
- j) may decide on the announcement of the public defense of the dissertation in the press,
- k) may propose the revocation of the appointment of the Head of the Doctoral School,
- l) acknowledges the minimum credits required for admission to the individual preparatory complex examination,
- m) makes proposals to the Doctoral Council regarding the requirements for the admission of PhD students, the rules governing the submission of applications and the admission procedure, and forwards the ranking of students established during the admission procedure to the Doctoral Council,
- n) approves the annual quality objectives of the Doctoral School and evaluates their fulfillment after the deadline for the quality objectives has expired,
- o) determines the scope of data to be collected, analyzed, and made publicly available regarding the operation of the Doctoral School, and monitors the implementation of the data collection and analysis process,
- p) develops and approves the requirements for publication performance,
- q) performs all other tasks assigned to it by university regulations.
- (6) The proposal specified in paragraph (5) g) shall be prepared by the Head of the Doctoral School on the basis of a list of candidates approved by a simple majority of the Doctoral School Council.
- (7) The Doctoral School Council shall meet as necessary, but at least once every six months. A meeting shall be convened without delay if requested by one-third of the members or by the chair of the Doctoral Council. The meeting shall be convened by the chair of the Doctoral Council in writing, indicating the agenda, at least 5 working days prior to the meeting at. The council shall have a quorum if at least half of its members are

present and shall take its decisions by open vote, by a simple majority of the members present, except in the cases specified in these Rules. Secret ballots shall be held on personnel matters. The secretary shall prepare minutes of the meetings, which shall be authenticated by the signatures of the chair and the secretary.

(8) In justified cases, the Doctoral School Council may also adopt its decisions by electronic voting. Votes shall only be valid if cast from the email address provided in advance by the member. In the case of electronic voting, the vote shall be valid if more than half of the members of the Doctoral School Council have cast their votes. The vote shall be successful if more than half of the valid votes cast are identical.

### **Faculty members of the Doctoral School**

- **Section 6** (1) The faculty members of the Doctoral School are university instructors and researchers with academic degrees who are capable of performing teaching, research, and doctoral supervision tasks. The Doctoral School Council shall decide on the appointment of the Doctoral School's teaching staff by majority vote, based on the recommendation of the Head of the Doctoral School. The Doctoral Council shall approve their appointment if it considers them suitable on the basis of their sustained, high-level academic performance.
- (2) Requirement for appointment as a faculty member at the Doctoral School is a PhD degree.
- (3) Faculty members of the Doctoral School may announce topics within the framework of doctoral training.

# The supervisor

**Section 7** (1) The doctoral supervisor shall be a university lecturer or researcher holding a PhD or DLA degree, whose proposed doctoral topic has been approved by the Doctoral School Council and who, on this basis, is responsible for directing and supporting the PhD student's studies and research work, as well as for preparing PhD students, PhD candidates, and predoctors for the attainment of their academic degree.

- (2) The supervisor
- a) announces the doctoral topic,
- b) certifies the completion of the PhD student's research tasks by recording this in the Neptun educational administration system (hereinafter: EAS, in Hungarian: Tanulmányi Rendszer TR),
- c) evaluates the PhD student's work report each semester and comments on the PhD student's performance,
- d) assists the PhD student or PhD candidate in the preparation of the doctoral dissertation and scientific publications,
- e) makes proposals for the PhD student's education and research plan and assists in its implementation.
- (3) After obtaining a doctoral degree, lecturers or researchers may undertake supervision after two years if they have further, independent, documented successful research work and publication activity, as evidenced by the authorship of at least five scientific publications from the last five years. The supervisor shall document their ongoing scientific activity with data recorded in the HDC database.
- (4) Additional criteria for the selection of supervisors at the Doctoral School:
  - a) domestic and/or international network of professional contacts,
  - b) outstanding professional and scientific activities accepted by the Doctoral School Council,

- c) consideration of the current workload of the instructor,
- d) consideration of the instructor's current research activities,
- e) consideration of the strategic interests of the Faculty of Natural Sciences.
- (5) A PhD student or PhD candidate may have two supervisors at the same time. The appointment of a cosupervisor may be made upon request to the Head of the Doctoral School and with the approval of the Doctoral Council. The name of the supervisor or supervisors shall be clearly indicated on the title page of the doctoral dissertation. A change of supervisor may be made upon request to the Head of the Doctoral School and with the approval of the Doctoral Council.
- (6) A supervisor may supervise a maximum of six PhD students with active student status at the same time. The number of PhD students shall be calculated on the basis of the data provided on the website www.doktori.hu.

#### Rules of discounts on self-financed tuition fee

- **Section 8** (1) The Head of the Doctoral School may decide to reduce the amount of self-financing payable by the student. The formal and substantive requirements for students to apply for a reduction based on their academic performance shall be determined by the Doctoral School, taking into account the recommendations of the relevant faculty, as follows:
- a) Based on their academic and/or research performance, students are entitled to a reduction of up to 80% of the tuition fees.
- b) The extent of the reduction shall be proposed by a three-member committee (chair and two reviewers) appointed by the Chair of the Doctoral School Council on the basis of a 20-minute presentation demonstrating the student's professional progress.
- c) The Head of the Doctoral School shall decide on the reduction.
- (2) When assessing applications for reduction, the training costs determined in accordance with the rules on cost calculation set out in Chancellor's Instruction No. 4/2022 shall be taken into account, and it shall be ensured that the reduction in tuition fees does not result in the doctoral school in question becoming taking into account all training provided by the doctoral school in question become loss-making. From 1 January 2015, students may apply for a reduction in the tuition fees/costs to be paid by them no later than the last working day of the registration period. From January 1, 2015, students whose payment requirement notice are prepared for some reason in September (or later) for the fall semester and in February (or later) for the spring semester may submit a request for a discount after the specified deadline. In this case, the deadline for submitting the application is 8 days from the date of notification of the payment requirement (notification), but no later than the payment deadline. Decisions on student requests shall be sent by the Doctoral School to the student concerned and to the Central Registrar's Office (hereinafter: CRO, in Hungarian: Központi Tanulmányi Iroda KTI) by March 15 in the spring semester and by October 15 in the fall semester, ensuring that the University can fulfill its data reporting obligations under the law with accurate data.
- (3) In the case of students enrolled in doctoral programs, the Head of the Doctoral School may, at the student's request, grant an extension of the payment deadline for any instalment of the tuition fee in the presence of objective circumstances substantiated by documentary evidence (e.g., foreign scholarship, delayed arrival of a foreign student loan) according to Section 52 in the Code of Charges and Benefits of University of Pécs. In such cases, the deadline for payment may not be later than the day preceding the first day of the examination period for the given semester.

# Rules for scholarships available to students through application

**Section 9** PhD students may also apply for other scholarships in accordance with Section 25 of Code of Charges and Benefits of the University of Pécs. The Doctoral School shall inform students of current application opportunities on its website.

### Rules for admission to the doctoral programs

- **Section 10** (1) Hungarian and foreign citizens who have a master's degree and professional qualification obtained in Hungary or abroad, or who will obtain such a degree in the year of admission, prior to enrollment, and who have the foreign language skills required for the field of study as specified in the Regulations, may apply for the doctoral training. Applications can be submitted for the topics announced by the supervisors of the Doctoral School. The topic descriptions, as well as the further requirements for applying to the doctoral programs, are made available to everyone on the Doctoral School's website and on www.doktori.hu.
- (2) Applications for doctoral programs can only be submitted online using the online application form available on the doctoral program application platform, with all required attachments uploaded. The application becomes final when, after submitting the online application form, the applicant prints out the confirmation form, signs it, and submits it to the Doctoral School.
- (3) Application requirements:
- a) an MSc degree in natural sciences (including a teaching degree in natural sciences), engineering or medicine (or a university degree obtained before the Bologna process),
- b) a minimum overall grade point average of 3.0 in degrees described in point a) (valid for degrees obtained in Hungary since 2001),
- c) applicants must have at least one state-recognized intermediate level "C" language exam in a language in which the scientific literature of the field can be studied.
- (4) Documents to be attached to the application:
- a) completed and signed application form,
- b) curriculum vitae, copy of document certifying foreign language proficiency,
- c) research proposal or letter of motivation,
- d) statement of support from the supervisor
- e) proof of payment of the application fee,
- f) a copy of the university diploma, submitted by the deadline specified in the admission procedure, with the proviso that failure to meet the deadline will result in the rejection of the application (in the event of a delay in issuance, the missing document may be submitted at a later date).
- g) proof of the activities described in point (8) c) with credible documents, or, if available, any other documents proving previous professional achievements.
- (5) Applicants shall indicate in their application whether they wish to pursue their studies with state funding or at their own expense. Applicants may indicate both forms but will only be admitted to the form of funding indicated in their application.

- (6) Applicants shall indicate in their application whether they wish to pursue their studies on a full-time or part-time basis. Applicants may indicate both forms, but they will only be admitted to the program with the work schedule indicated in their application.
- (7) The admission procedure shall be conducted by an Admission Committee appointed by the Doctoral Council and consisting of at least three members. The Admission Committee shall consist of a chairperson and at least two other members who are lecturers/researchers affiliated with the Doctoral School. The chairperson shall be the Head of the Doctoral School or a full professor affiliated with the Doctoral School appointed by the Head of the Doctoral School. The members of the Admission Committee shall be proposed by the chairperson of the Doctoral School.
- (8) In the case of an in-person admission procedure, or, in justified cases, an online admission procedure as decided by the Admission Committee, the applicants shall be evaluated as follows:
- a) The oral exam is worth a maximum of 15 points
- b) The admission value of the degree obtained in accordance with point (3) a) is as follows:

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3.01 to 3.25 1 point
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3.26 to 3.50 2 points

3.51 to 3.75 3 points

3.76 to 4.00 4 points

4.01 to 4.25 5 points

4.26 to 4.50 6 points

4.51 to 4.75 7 points

4.76 to 5.00 8 points

- c) Scoring of scientific activities:
- Association for Student Research activities: participation in Student Research Conferences (TDK) 1 point, participation in National Student Research Conferences (OTDK) 2 points, 2nd-3rd place in OTDK 4 points, 1st place in OTDK 5 points
- Pro Scientia award 10 points
- Publication activities:
  - poster at an international conference 2 points presentation at an international conference 4 points
  - publication in a journal with impact factor 6 points
- If justified by scientific performance (e.g., publication in a scientific journal with a high impact factor), an additional 5 points may be awarded for scientific activity.
- d) State-recognized advanced or intermediate level "C" language exam or equivalent certificate: advanced level
- 5 points, intermediate level 3 points.
- (9) The Admission Committee shall draw up a report on the admissions procedure, which shall be kept by the person responsible for the administration of the Doctoral School and authenticated by the signatures of all members of the Admission Committee. The minutes shall include the calculation of the applicants' scores, listing the items taken into account and the scores awarded for them, as well as their total. The minutes shall also include a summary of the content of the oral entrance examination conducted by the Admission Committee.
- (10) Based on the recommendation of the Admission Committee, the Doctoral Council shall make the final decision on admission. Those who obtain a total of at least 18 points in the entrance examination shall be admitted to the Doctoral Program.
- (11) The Doctoral School announces admissions once per academic year, at the end of the spring semester, followed by a supplementary admission procedure once before the start of the fall semester. In exceptional cases, the Doctoral School may announce an additional supplementary admission procedure for cross-semester training at the end of the fall semester.

- (12) Those who did not submit an application for the admission procedure in the given calendar year or were not admitted may apply in the supplementary admission procedure.
- (13) Admission decisions shall be published by the Doctoral Council on its website in anonymized form. The Doctoral Council shall send the decision to the applicant through the doctoral administration; in the event of rejection, the decision must be justified, and the applicant must be informed of the right to appeal. Applicants may appeal against the decision within 15 days of notification or of becoming aware of it, which must be submitted to the body that issued the first-instance decision, addressed to the Second-Instance Study Committee. In the event of admission, the notification shall specify the date of enrollment, the documents required for enrollment, and the start of the academic year. Reference shall be made to the costs associated with the program and how they are to be covered. The decision on admission shall include the name of the Doctoral School and the field of study for the degree.
- (14) In the case of applications for doctoral training, the procedural fee is HUF 9,000 (nine thousand) per application. When submitting the application, proof of payment must be provided to confirm that the applicant has paid the procedural fee to the Doctoral School.
- (15) A PhD student or PhD candidate who established their PhD student status or PhD candidate status prior to the 2016/2017 academic year is eligible to apply for admission to doctoral training, provided that the eight-semester state-funded support period specified in Section 47 (2) of the Nftv. taking into account any support period already used in doctoral training is not exceeded. In the same field of study, an application for a state-funded doctoral programme may only be submitted if the applicant has not obtained a degree certificate during their previous doctoral training.
- (16) Students may also enter doctoral training by participating in preparatory courses that form part of doctoral training in parallel with their studies in the final year of their master's program, provided that they meet the admission requirements after obtaining their master's degree. At the same time as the admission decision, the credits earned in the master's program will be recognized based on the decision of the Doctoral Council.
- (17) Exceptionally talented applicants who have obtained a bachelor's degree and professional qualification, or who, in parallel with their studies in the last two academic years of an undivided master's program, have and have achieved first place in a TDK section relevant to their field of research, or first, second or third place in an OTDK section, or have been listed as an author in a publication. Applicants must pass an entrance examination and demonstrate that they have outstanding academic, scientific and language skills.
- (18) The detailed rules for submitting applications and the admission procedure are set out in this Regulation by the Doctoral School and the Doctoral Council in accordance with Section 13 (2) (j) of the Doctoral Regulations of the University of Pécs.

# Rules for the Admission of Individual Preparatory PhD Candidates

- **Section 11** (1) Those who have prepared individually for obtaining the doctoral degree may also join the doctoral program, provided that they have fulfilled the admission and doctoral program requirements and their application has been approved by the Doctoral Council in accordance with Section 26 (1) of the Doctoral Regulations of the University of Pécs. In this case, student status shall be established upon completion of the complex examination.
- (2) The conditions for acceptance of the application for the complex examination and admission are, in the case of individual preparation, compliance with the academic requirements and fulfilment of the publication and language requirements for obtaining the doctoral degree. Upon admission, the Doctoral School shall recognize the minimum credits specified as a condition for admission to the complex examination, with the

proviso that, upon request, additional credits may be recognized on the basis of previously acquired knowledge and competencies. The Doctoral School shall appoint a consultant for each individual preparatory PhD candidate.

- (3) The Doctoral Council shall examine whether the applicant's academic performance justifies the acceptance of the individual preparation form.
- (4) Within five academic years of establishing their student status, students preparing individually must submit a doctoral dissertation in accordance with the Regulations.

## Rules for admission parallel to master's programs

**Section 12** (1) Admission to a master's program in parallel with a doctoral program is possible in accordance with the provisions of Section 10 (16) and (17) of the Regulations.

(2) Applicants must pass an entrance examination and provide documentary evidence of their academic, scientific and linguistic excellence in accordance with Section 10 (17). The admission requirements and procedure are governed by Section 10 of the Regulations.

## Rules for the recognition of certain credits

**Section 13** In the specialized postgraduate training system in the field of health care, from the period of core training and specialized practical training completed as a resident, or as a central intern in vocational training designated to ensure the supply of teaching staff for higher education institutions, the Doctoral Council may, by decision, recognize up to two semesters or sixty credits towards doctoral training.

#### Curriculum, rules for doctoral programs

- **Section 14** (1) The Doctoral School Council shall prepare the Doctoral School Curriculum, which shall be approved by the Doctoral Council. The Curriculum shall be reviewed annually by the Doctoral School Council in accordance with Level 8 of the Hungarian Qualifications Framework, and the revised draft shall be submitted to the Doctoral Council for approval. Upon approval, the Doctoral School shall arrange for the prompt publication of the new version the new version on the Doctoral School's website.
- (2) During the preparation and review of the Curriculum, the Doctoral School shall seek the opinions of external experts, cooperating partners and students involved in the training, which shall be taken into account during the review.
- (3) The Doctoral School implements the doctoral programs within the framework of the Curriculum, which specifies the credits that can be earned for each activity.

### Requirements for obtaining a doctoral degree

- **Section 15** (1) For PhD students who began their studies prior to the 2016/2017 academic year, the requirements for obtaining a doctoral degree are as follows, as determined by the Doctoral School:
- a) successful completion of the doctoral comprehensive examination,
- b) proof of a state-recognized or equivalent type C intermediate-level English language examination, which in the case of deaf students may also be proven by demonstrating knowledge of a sign language other than Hungarian. Candidates with certified dysgraphia or dyslexia may also prove their English language proficiency by presenting their dissertation defense in English,
- c) independent scientific work, presented in articles or studies (see Section 19),
- d) registration of works certifying scientific work in the national scientific bibliographic database,
- e) obtaining an absolutorium,
- f) submission and successful defense of the doctoral dissertation.
- (2) For PhD students who established their legal relationship in the 2016/2017 academic year and thereafter, until December 20, 2022, the conditions for obtaining a doctoral degree are as follows:
- a) completion of the credits required for doctoral training,
- b) proof of a state-recognized or equivalent type "C" secondary school English language exam, which in the case of deaf students may also be proven by demonstrating knowledge of a sign language other than Hungarian. Candidates with certified dysgraphia or dyslexia may also prove their knowledge of English by presenting their dissertation defense in English,
- c) independent scientific work, presented in articles and studies (see Section 19),
- d) registration of works proving scientific work in the national scientific bibliographic database,
- e) obtaining an absolutorium (pre-degree certificate stating that all course-units have been completed),
- f) submission and successful defense of a doctoral dissertation.
- (3) For those who commence their doctoral studies after December 20, 2022, the conditions for obtaining a doctoral degree are as follows:
- a) completion of the credits required for doctoral training,
- b) proof of a state-recognized or equivalent Type C intermediate-level English language examination, which in the case of deaf candidates may also be proven by demonstrating knowledge of a sign language other than Hungarian. Candidates with certified dysgraphia or dyslexia may also prove their English language proficiency by presenting their dissertation defense in English,
- c) independent scientific work, presented in articles or studies (see Section 19),
- d) registration of works certifying scientific work in the national scientific bibliographic database,
- e) obtaining an absolutorium,
- f) submission and successful defense of the doctoral dissertation.
- (4) The required language proficiency may be demonstrated by:
- a) certificate of a state-recognized 'C' type intermediate-level language examination (or equivalent) in a foreign language,
- b) recognition of a university degree obtained abroad,
- (5) For PhD students of Hungarian nationality residing outside the borders of Hungary, the official language of their home country (other than Hungarian) may be accepted as a second language if the PhD student obtained their degree in that language or can provide credible proof of their language proficiency.

(6) During doctoral studies, the Code of Studies and Examinations of the University of Pécs shall apply any matters not regulated in these Regulations concerning the assessments (exams, complex exams) included in the Study Plan and the possibilities for appealing against assessments.

# The complex examination

# **Section 16** (1) Conditions for admission to the complex examination:

- at least 120 credits (with the exception of candidates preparing individually for a doctoral degree, whose student status is established upon application for and acceptance to the complex examination)
- prior submission of a short report of no more than 16 pages covering the first 4 semesters.
- (2) The supervisor has the opportunity to submit a written evaluation of the candidate to the Doctoral Council in advance of the application for the examination.
- (3) The complex examination shall be taken in public before a committee. The examination committee shall consist of three members, at least one of whom shall not be employed by PTE. The chair of the examination committee shall be a full professor, habilitated associate professor, habilitated college professor, professor emeritus, or lecturer with the title of Doctor of the Hungarian Academy of Sciences who is employed by PTE. All members of the examination committee shall hold an academic degree. The doctoral supervisor of the PhD candidate may not be a member of the examination committee. The requirements for the complex examination and the members of the examination committee shall be decided by the Doctoral Council on the recommendation of the Doctoral School Council.
- (4) The complex examination consists of two parts:
- a) the "theoretical" part assesses the candidate's theoretical knowledge,
- b) in the "research" part, the examinee's scientific progress is assessed.

In the theoretical part of the complex examination, the candidate takes an exam in one main subject and one minor subject. In the research part of the complex examination, the candidate gives a presentation on their research.

- (5) The examination committee evaluates the theoretical and research parts of the examination separately in a closed session. A report containing a written evaluation of the complex examination shall be prepared.
- (6) When applying for the theoretical part of the complex examination, the student may, with the approval of their supervisor, submit a proposal to the Head of the Doctoral School for the complex examination subjects specified in the Curriculum.
- (7) In the theoretical part of the complex exam, the exam committee will give a passing or failing grade for each subject. If the examinee fails any of the subjects, they may retake the exam for that subject once during the same exam period on the date designated for retake exams.
- (8) Requirements for the research part of the complex exam:
  - a) Describe the research areas and open questions where you have achieved results and wish to achieve results. Provide a summary of the current situation in the field.
  - b) Briefly summarize your results to date.
  - c) Provide your research and publication plans for the next two years.

- d) Submit in advance to the committee copies of any journal/conference articles you have submitted for publication (those accepted and those under review).
- (9) If the research part of the exam is not passed, it cannot be repeated and the student's status as a student will be terminated.
- (10) The complex exam is graded on a two-point scale: pass or fail.
- (11) The conditions of the complex exam not regulated in these Regulations are contained in the Doctoral Regulations of the University of Pécs.

#### The doctoral dissertation

- **Section 17** (1) The requirements for the candidate's scientific publications at the time of submission of the dissertation are set out in Section 19.
- (2) The dissertation must be written in Hungarian or English. Dissertations written in Hungarian must also include an English summary.
- (3) The dissertation must contain a concise overview of the preliminary knowledge relating to the researched topic, the research objectives based on this, the research methods, a description and documentation of the new research results proving the candidate's independent scientific work, a comparison of the new results with previously known data and views, a concise summary of the new results (theses), a detailed list of the literature used on the subject, a list of the candidate's own publications on the subject, and the dissertation booklet.
- (4) The theses must indicate which of the candidate's publications they are based on.
- (5) The dissertation booklet is a summary of the dissertation, briefly presenting its subject, methods, and new results, with a list of directly used literature and the candidate's own studies published on the topic.
- (6) Depending on its nature, the dissertation should be between 40 and 100 pages long; in addition, any necessary appendices may be included. The dissertation must be bound in black leather, A/4 size, in print quality, and submitted in three copies. The title page must include the candidate's name and the words "Doctoral Dissertation" or "PhD Dissertation" in gold lettering.
- (7) The inside title page must include the author's name and the title of the dissertation, as well as the exact name of the Doctoral School and program, the name of the supervisor, the year of submission, and the university's coat of arms.
- (8) The dissertation booklet must be bound in A/5 format. It may not exceed 10 pages in length, excluding the bibliography and a list of the author's own publications on the subject. The title page must contain the same information as the internal title page of the dissertation. The dissertation booklet must be prepared in Hungarian and English, with five copies of the Hungarian version and five copies of the English version.
- (9) The dissertation should be typeset with double spacing and 12-point font, while the dissertation booklet should be typeset with double spacing and 11-point font. In all other respects, the general rules of typography apply. The bibliography must be prepared in the format used by Physical Review. The use of the LaTeX text formatting system is preferred.
- (10) The dissertation and dissertation booklet must also be submitted in electronic form. The dissertation must be sent in pdf format and the dissertation booklet in pdf and Word format to the email address of the head and secretary of the Doctoral School.

- (11) The doctoral dissertation may only be submitted after obtaining the absolutorium.
- (12) Conditions for the doctoral dissertation not regulated in these Regulations are contained in the Doctoral Regulations of the University of Pécs.

#### Publication of the doctoral dissertation

- **Section 18** (1) The doctoral dissertation and its theses are available to everyone. The Doctoral School, in cooperation with the University Library and Knowledge Center (hereinafter referred to as the Library) in such a way that one printed copy and one electronic copy of the doctoral dissertation and its theses are made available in the manner specified in paragraphs (2) and (3).
- (2) The doctoral dissertation and theses shall be registered and stored in full text in electronic form in a separate database in the doctoral repository of the Pécs University Archive (hereinafter: PUA, un Hungarian: Pécsi Egyetemi Archívum PEA) operated by the Library. The Doctoral School shall ensure that the doctoral repository is uploaded prior to the defense procedure. After data management, the Library shall place the data and the full text of the doctoral dissertation and its theses in the PUA's "Dissertations awaiting defense" ("Védés előtt álló disszertációk") collection.
- (3) In addition to being placed in the repository, the dissertation shall be made available to everyone in the language of the public defense, with its theses in Hungarian and English, or in other languages appropriate to the specific field of study, at the address provided on the website www.doktori.hu.

#### **Independent scientific work**

- **Section 19** (1) PhD students who begin their studies by September 21, 2022, must have at least two publications with an impact factor that have been published in a peer-reviewed journal or accepted for publication, the results of which are used in the dissertation. The combined impact factor of these publications must not be less than 2, and at least one publication must be classified as Q1–Q4 or published in a journal classified by the relevant department of the Hungarian Academy of Sciences; Furthermore, if the field of the dissertation allows it, the candidate must be the first author of at least one of the publications and must have published at least one publication in a foreign language. These conditions may be fulfilled by a foreign-language publication in a journal with an appropriate classification.
- (2) For students who establish their student status on or after September 22, 2022, at least two publications, published or accepted for publication in a peer-reviewed journal classified as Q1–Q2 in the Scimago classification system in the given field, are required. Furthermore, if the field of the dissertation allows, the candidate must be the first author of at least one of the publications.
- (3) For students who establish student status on or after September 22, 2022, if the student is enrolled in the "Science Teacher Training" program, at least two publications, published or accepted for publication in a peer-reviewed journal classified as Q1–Q3 in the Scimago classification system in the given field, are required. Furthermore, the candidate must be the first author of at least one of the publications.

#### Knowledge of foreign languages

**Section 20** English is the language accepted as the first foreign language required for obtaining a doctoral degree. An exception is the "Scholar-Teacher Training Program" program, where English, German, Italian, French, Spanish, or Russian are accepted as the first foreign language.

# **Quality management**

- Section 21 (1) The Quality Assurance Plan and Quality Policy of the Doctoral School shall be adopted by the Doctoral Council upon the recommendation of the Doctoral School Council. The Quality Policy shall be reviewed at least once a year by the Doctoral School Council.
- (2) The Doctoral School Council shall adopt the quality objectives set by the Head of the Doctoral School on an annual basis and shall evaluate their fulfillment after the deadline.
- (3) The Quality Assurance Plan, Quality Policy and quality objectives shall be published in accordance with Section 22.
- (4) During their studies, PhD students may express their opinion every semester on their satisfaction with the teaching activities of lecturers employed by the University or in other legal relationships with the University and with the quality of teaching, in accordance with the University's Regulations on the Procedure for Student Evaluation of Teaching.

# **Ensuring public access**

**Section 22** The Doctoral School shall publish the following documents and data concerning the Doctoral School on its website:

- a) the Organizational and Operational Regulations of the Doctoral School, which shall also be published in the national doctoral database (hereinafter: HDC database) and on the website http://doktori.hu;
- b) Curriculum,
- c) Quality Policy,
- d) Quality Assurance Plan,
- e) Quality objectives and their evaluation,
- f) Organizational structure (organogram),
- g) Doctoral Regulations of the University of Pécs,
- h) Code of Studies and Examinations of the University of Pécs,
- i) Code of Charges and Benefits,
- j) total cost of training,
- k) sum of tuition fees,
- 1) the scope of data to be published by the Doctoral School Council in accordance with Section 5 (5) o) of the Regulations.

# Fees for doctoral training

**Section 23** (1) Doctoral candidates are required to pay the following procedural fees:

- a) a degree procedure fee, which is HUF 80,000 (one eighty thousand),
- b) a comprehensive examination fee, which is HUF 20,000 (twenty thousand),

- c) a defense fee, which is HUF 120,000 (one hundred and twenty thousand).
- (2) PhD students who commence their studies in the 2016/2017 academic year and thereafter shall, if the defense procedure takes place after the termination of their student status, pay a defense fee as a procedural fee. The amount of the defense fee shall be HUF 120,000 (one hundred and twenty thousand) even in the case of degree procedures conducted in a foreign language.
- (3) The Doctoral School shall publish the procedural fees in accordance with Section 22.
- 4) The degree procedure is free of charge for PhD students during their student status.

# Final, transitional and effective provisions

**Section 24** (1) These Regulations shall enter into force on the date of their adoption, simultaneously repealing the Organizational and Operational Regulations of the Doctoral School of Physics adopted on May 8, 2023.

- (2) The publication activity specified in Section 19 (1) of these Regulations shall be mandatory for PhD students admitted after March 21, 2019.
- (3) Matters not regulated in these Regulations shall be governed by Act CCIV of 2011 on National Higher Education, Government Decree 87/2015 (IV. 9) on the implementation of certain provisions of the Nftv. Government Decree on the implementation of certain provisions of the Act on National Higher Education, Government Decree 387/2012. (XII. 19.) on doctoral schools, doctoral procedures and habilitation, and the provisions of the Doctoral Regulations of the University of Pécs and other internal regulations shall apply.

Pécs, 2025. august 18.

Dr Gábor Lente PhD

Chair of the Doctoral Council

Dr László Pálfalvi PhD

Head of the Doctoral School

#### Clause:

These regulations were adopted by the Doctoral Council of Natural Sciences at its meeting held on 30 september 2025.