# **University of Szeged**

# **Doctoral School of Physics**

organizational and operational regulations

## 1. Structure, tasks and operation of the doctoral school council

The head of the doctoral school and the heads of the doctoral programs are elected by the doctoral council from among the core members of the doctoral school who hold the title of Doctor of the Hungarian Academy of Sciences - upon the proposal of most of the core members - and are appointed by the rector for a maximum period of five years. The appointment may be extended several times.

The council of core members has the right to make proposals for the Regulations of the doctoral school in case of an absolute majority (i.e., taking into account those absent).

The Doctoral School Council meets at least once per semester and holds extraordinary meetings when necessary. The permanent members of the Doctoral School Council are:

- the head of the doctoral school, who is also the chairman of the doctoral council, or his/her deputy
- the heads of the training/research programs, or their deputies
- the secretary of the doctoral school, or his/her deputy
- the permanent invitees of the meeting are the core members of the doctoral school who are not heads of training programs
- the permanent invitees of the meeting with the right to consult are the former core members of the doctoral school who hold the title of emeritus professor and are elected as an emeritus core member by the doctoral school council
- the permanent invitees of the meeting with the right to consult are the student representative

The doctoral meeting has a quorum if the head of the school, at least 4 voting representatives of programs, and more than half of the voting members of the Council excluding those who are absent for a long period of time (i.e. for at least three months), are present.

The decision-making authority of the doctoral school council includes:

- selecting the topics and committees of the entrance exams, carrying out the admissions according to the regulations of the Doctoral Council of Natural and Technical Sciences
- evaluation of admission results, ranking of applicants
- announcement and professional control of doctoral courses
- evaluation of the annual work of doctoral students
- admitting new supervisors and approving their proposed research topics
- habitus examination of doctoral degree applicants:
  - examination and evaluation of compliance with publication requirements
  - evaluation of study obligations (whether they comply with the requirements of the training system)
- selecting the members of complex examination committee

- selecting the members of defence committee
- voting on the award of the degree, based on the results of the defence
- professional assessment of students' applications submitted for any academic or degreeseeking matter
- deciding on economic issues affecting the school:
  - payment obligations of fee-paying students
  - financial control of proposals concerning the doctoral training (at school or faculty level)
- deciding on issues concerning the school's requirements:
  - list of comprehensive exam subjects
  - topics of complex exam subjects
  - establishing requirements for publications in order to obtain a doctoral degree
  - requirements for knowledge of foreign languages
  - the language and formal requirements of the dissertation
  - carrying out the public debate, circle of invitees
  - aspects of evaluation criteria
  - condition for the award of the doctor honoris causa

The Doctoral School Council makes recommendations on the following matters:

- doctoral school operating regulations and training plan
- admission of applicants to doctoral school
- awarding of doctoral degrees
- composition of the admissions committee
- election of new core members
- launch of a new training program

### 2. Doctoral School training programs

The topics of the doctoral school programs are included in the training plan. Within a given program, the program director determines the content of the program based on consultation with the participating lecturers. He/she reports on these at the doctoral council meetings. Doctoral school training programs:

- Astrophysics and gravitational theory
- Biophysics
- Theoretical and mathematical physics
- Medical imaging, radiology
- Optics, laser physics

The Council involves relevant research institutions and industrial partners cooperating with the doctoral school, i.e. labour market actors, in the development and updating of training programs. In addition to maintaining continuous contact, they participate in the development and updating of training as external supervisors and/or lecturers in one of the doctoral programs.

# Rights and responsibilities of training programs operating within the doctoral school

It has the right to make proposals to the Council

- to include new doctoral courses in the given training program
- to admit new topic announcers
- to include new research topics in the program
- to the composition of the complex examination committees related to the program
- to the list of complex examination subjects and their topics

- to the composition of the defence committees related to the program

#### Tasks:

- to prepare and continuously supervise the announcement of doctoral courses accepted by the Council
- to continuously develop and update the given training program
- to keep the research topics related to the program up to date
- annual oral report to the Council

#### 3. Doctoral School Administration

The administrative tasks of the doctoral school are performed by a secretary with a PhD degree, appointed by the doctoral council. The secretary is assisted by an administrator in the following matters:

- organizing doctoral sessions
- maintaining contact and official correspondence with the faculty and university doctoral institutes
- presenting incoming official letters, degree applications and documents to the doctoral council
- administering the decisions of the doctoral council
- electronic announcement of doctoral courses
- announcing the research topics of the supervisors on the website of Hungarian Doctoral Council
- electronic administration of the completion of doctoral courses in the NEPTUN
- organizing and administering the doctoral entrance exam
- administering the proposals of the doctoral school

# 4. Doctoral school admission procedure at the Doctoral School of Physics

The general requirements for the entrance exam to doctoral school are set out in the regulations of Doctoral Council of Natural and Technical Sciences. The admission committee determines the result of the entrance examination based on the applicant's academic achievements, scientific results, and professional suitability.

## Admission process:

- The doctoral council appoints the admission committee, the date and place of the exam.
- The members of the admissions committee are the lecturers of the training and research programs.
- The entrance exam is based on pre-appointed topics, and candidates can access the topics on the doctoral school's website at least 1 month before the exam.
- Each applicant takes an exam on pre-appointed topics that are specific to them and are related to the requirements of the training and research program they have chosen.
- The entrance exam is oral evaluated on a scale of 0 30 (30 is the best).
- The score of the oral exam is summed up with the applicant's other scores as prescribed in the Regulations (diploma grade, previous scientific work, and additional points for language skills).

- The summation of the scores and the ranking of the applicants based on this takes place at the doctoral meeting following the entrance examination. In addition to the members of the doctoral council, the chairman of the admissions committee (if he is not a member of the doctoral council) also participates in this meeting.

PhD admission scoring system	MSc obtained within 3 years	MSc obtained more than 3 years
BSc and MSc degree	max. 25 points	max. 20 points
BSc + MSc training	(BSc - 3.5)*20/3 + (MSc-3.5)*10	(BSc - 3.5)*16/3 + (MSc-3.5)*8
5 years training	(dipl.average - 3.5)*50/3	(dipl.average - 3.5)*40/3
Scientific achievements	max. 25 points	max. 30 points
TDK/student conference:	max. 20 points	max. 15 points
OTDK/national/international student conference 1. prize	20 points	15 points
OTDK/national/international student conference 2. prize	18 points	13 points
OTDK/national/international student conference 3. prize	16 points	11 points
OTDK/ national/international student conference praise, special award	14 points	9 points
TDK/local student conference 1. prize	16 points	11 points
TDK/local student conference 2. prize	14 points	9 points
TDK/local student conference 3. prize	12 points	7 points
TDK/participation in a local student conference	10 points	
publications:	max. 20 points	max. 30 points
article in periodical, IF>0, major author	20 points	20 points
article in periodical, IF>0, co-author	16 points	16 points
article in periodical, IF=0, major author	13 points	13 points
article in periodical, IF=0, co-author	10 points	10 points
conference article major author	13 points	13 points
conference article co-author	10 points	10 points
poster major author	7 points	7 points
poster major co-author	5 points	5 points
Hungarian scientific article major author	10 points	10 points
Hungarian scientific article co-author	7 points	7 points
Hungarian conference article major author	7 points	7 points
Hungarian conference article co-author	5 points	5 points
patent	1 - 20 points	1 - 20 points
demonstrator	1 - 3 points	1 - 3 points
Oral exam	max. 30 points	max. 30 points
Language examination certificate	max. 5 points	max. 5 points
C1 (Advanced)	5 points	5 points
B2 (apart from English)	3 points	3 points
Admission threshold	min. 42.5 points	min. 42.5 points

### 5. Obtaining a doctoral degree at the Doctoral School of Physics

The process of obtaining a degree and the related requirements are set out in the Doctoral Regulations of the University Doctoral Council and Doctoral Council of Natural and Technical Sciences, based on the applicable laws.

- During a complex exam, the candidate must take an exam in 2 subjects, which are determined by the doctoral school council, taking into account the candidate's research topic. In the case of individual candidates, the complex exam must be taken in 3 subjects.
- In the event of a request to initiate a complex examination procedure, the secretary of the doctoral school shall invite a rapporteur from the doctoral school council to check the required conditions, present the request and make a proposal to support it. Except in cases where the initiation of the procedure is guaranteed by a higher law. The doctoral school shall formulate its proposal regarding the subjects of the complex examination and its committee by open vote based on the rapporteur's proposal.
- The formal requirement for submitting a doctoral thesis for the candidate is to obtain an absolutorium in the doctoral school and at least two peer-reviewed articles published or accepted for publication in journals (having nonzero impact factor), which serve as the basis of the thesis. Furthermore, the candidate must be the main author of at least one of these articles.
- When a doctoral thesis is submitted, the secretary of the doctoral school appoints a referee from among the members of the doctoral school's council, who checks the fulfilment of the required formal and publication requirements, presents the application to the council and proposes whether it can be supported. Based on this referee opinion, the doctoral school proposes the composition of the thesis defence committee by open voting.
- The doctoral defence takes place in the manner prescribed in the Regulations.
- Following the defence, the Doctoral Council listens to the report presented by a member of the defence committee. Then, the members of the Doctoral Council with voting rights vote secretly on whether they support the candidate's degree. Voting options are yes or no, the support threshold being the yes vote attaining at least 2/3 of the votes. In the cases when the defence evaluation reached 85%, the council voting can be done electronically.