

Regulations – SZTE Doctoral School of Mathematics

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Legislation

- [Regulations for Doctoral Training and Doctoral Degree Acquisition at SZTE](#)
- [SZTE Habilitation Regulations](#)



The legislative background of the University of Szeged's doctoral regulations consists of the following laws and decrees:

- [Act CCIV of 2011 on National Higher Education](#)
- [Government Decree 387/2012 \(XII.19.\) on Doctoral Schools, Doctoral Procedures, and Habilitation](#)

1. Data of the Doctoral School

1. Name of the doctoral school
 - in Hungarian: Matematika Doktori Iskola
 - in English: Doctoral School of Mathematics
2. Field of science: natural sciences

3. Discipline: mathematics and computer science
4. Research area: all fields of mathematics, its applications, mathematics didactics
5. Institution: University of Szeged
6. Headquarters: SZTE Bolyai Institute, 6720 Szeged, Aradi vértanúk tere 1.
7. Website: <https://www.math.u-szeged.hu/phd/>
8. Year of establishment: 2002.

2. Management of the Doctoral School of Mathematics

The head of the doctoral school (DS) is a university professor, a core member, holding the title of Doctor of the Hungarian Academy of Sciences (DSc).

The head of the doctoral school is appointed by the Rector based on the proposal of the University Doctoral Council (UDC), the expert opinion of MAB, and the approval of the Senate. The mandate ends with the resignation or termination of full-time employment of the head.

The council of the doctoral school may elect a deputy head from among the core members of the school, subject to the approval of the competent Discipline-specific Doctoral Council (DDC). The deputy may temporarily substitute for the head in urgent matters during their absence.

The head's work may be supported by an administrator and a secretary. The tasks of the secretary are defined by the head of the doctoral school.

The duties of the head of the doctoral school are:

- responsibly directing the work of the doctoral school council and being accountable for enforcing its decisions;
- coordinating professional work and being responsible for its quality;
- representing the doctoral school;
- managing administration and communication with the competent doctoral councils;
- jointly with the head of the Bolyai Institute, monitoring the use of the school's financial resources.

3. Council of the Doctoral School of Mathematics

Professional activities at the doctoral school are directed by its head and the Doctoral School Council (DSC). The head is chair of the DSC; members are appointed or dismissed by the DDC on the proposal of core members.

The DSC submits proposals to the UDC for adding new core members to the already accredited

doctoral school.

Meetings of the DSC are convened by the doctoral school head. The meeting is quorate if at least half the members are present. Decisions are made via in-person or online voting. Minutes are taken of DSC meetings.

Invitees with consultative rights at meetings include:

- heads of training programs, if not elected members;
- the secretary and administrator of the doctoral school;
- a representative elected by the doctoral students.

The DSC makes open votes and submits proposals to the DDC for the composition of the following committees:

- admission committees;
- complex examination committees;
- doctoral defense committees.

4. Doctoral Training

4.1. Training Programs

The Doctoral School of Mathematics includes training programs in theoretical mathematics, applied mathematics, and mathematics didactics. Program heads are responsible for the scientific standards and educational work of their programs.

Program heads are tasked with proposing members for the complex examination and defense committees, and for procedural requests related to their program. They propose new theoretical subjects for the complex exam, new lecturers and teachers, and new research topics.

4.2. Admission to the Doctoral School

Applicants to the doctoral school must take an entrance exam before a committee of at least three members. The aim is to assess applicants' professional knowledge, intelligence, and orientation regarding their planned doctoral work, previous scientific activities, and language proficiency.

The committee evaluates applicants' performance, ranking them and recommending or not recommending admission. Evaluation criteria: grades, degree classification, OTDK prize, faculty TDK prize, TDK work, publications, conference participation, realism and promise of the planned research, and applicant's preparedness.

In justified cases, the entrance exam may be conducted with videoconferencing tools.

4.3. Doctoral Credits

The credit requirement for the doctoral program is 240.

Before the end of each reporting period, the doctoral student prepares a report on their work for the DS head; the supervisor reviews and signs it.

At the Doctoral School of Mathematics, credits for studies, research, and teaching activities can be earned as follows.

4.3.1. Study Credits

During the first two years, the student must complete at least 5 courses (at least 2 in the first year).

The DS announces doctoral courses at the start of each semester. Each course (regardless of contact hours or whether it is a reading course) is worth 5 credits.

At the student's request, online courses, summer or winter schools, and workshops may be accepted as courses. The request, supported by the supervisor, must be submitted to the DS head.

4.3.2. Research Credits

Fulfillment of research credits is certified by the supervisor.

Activities related to research seminars, conferences, and publications may be credited multiple times in a semester. For publication-related credits where the doctoral student is a co-author, the DSC may allocate credits.

Processing literature	10 credits
Preparation of research plan	5 credits
Writing a study	10 credits
Regular weekly consultation with supervisor	10 credits
Preparation of research report	5 credits
Participation in research seminar (2 hours/week)	3 credits
Presentation at research seminar	3 credits
Presentation at a Hungarian-language conference	3 credits
Presentation at an international (foreign-language) conference	5 credits
Submission of publication to a refereed journal published in a world language	15 credits
Final acceptance of publication in a refereed journal published in a world language	15 credits
Other accepted scientific publication	10 credits

4.3.3. Teaching Credits

Holding practical classes for an academic semester grants 2 credits per weekly teaching hour. A maximum of 8 credits can be earned per semester under this heading.

The student must request recognition of teaching credits. Fulfillment is verified and certified by the teaching coordinator of the Bolyai Institute.

4.4. The Complex Exam

During the doctoral program, at the end of the fourth semester, as the conclusion of the training and research stage and as a prerequisite for the research and dissertation stage, a complex exam must be passed, which measures and assesses academic and research progress.

Eligibility for the complex exam requires acquisition of at least 90 credits during the first four semesters of the training and research phase and all study credits specified in the doctoral school's training plan. An exception is made for individual preparation students, whose student status is established upon successful completion of the complex exam.

The complex exam consists of two main parts: one measuring theoretical preparedness (theory part) and the other assessing scientific progress (dissertation part).

In the theoretical part of the exam, the candidate takes exams in at least two subjects/topics, with the list included in the doctoral school's training plan. The theory exam may include a written component.

In the second part, the candidate gives a presentation on literature knowledge, reports research results, presents the research plan for the second stage, and outlines the dissertation and publication schedule.

Prior to the exam, the supervisor evaluates the candidate in writing, addressed to the exam committee chair.

5. Degree Acquisition Procedure

After successful completion of the complex exam, the student proceeds with the second, research and dissertation stage of the doctoral program, which is part of the degree acquisition procedure.

Minutes must be kept of each phase of the doctoral procedure.

5.1. Foreign Language Requirements

By the end of the program, the doctoral student must have at least an intermediate level language exam in a foreign language (preferably English) that has significant mathematical literature.

5.2. Publication Requirements

Submitting the doctoral dissertation for evaluation requires at least two publications, published or

accepted for publication, on the dissertation topic, which have been (or will be) published in an international, world-language, refereed journal.

For acceptance or rejection of these two publications, the professional standard of the journal is a decisive factor. The doctoral school council evaluates the weight of each publication on a case-by-case basis.

The Doctoral School of Mathematics welcomes if the candidate has a Hungarian-language publication in a domestic journal. If such a publication has been covered by an international abstracting journal, the council may, in exceptional cases, consider it for inclusion.

5.3. Submission of the Dissertation

Within three years of passing the complex exam, the doctoral student must submit a doctoral dissertation in accordance with the doctoral regulations. Prior to submission, a preliminary discussion (internal defense) is held on the dissertation, with minutes prepared.

Submission of the dissertation requires acquisition of the absolutorium. Upon submission, the DDC, based on the relevant doctoral school council's proposal, appoints the review committee and designates two official reviewers, as well as a substitute reviewer and members.

For the dissertation to be admitted to public defense, it must be screened for plagiarism before uploading to the Doctoral Repository.

At least one bound copy of the dissertation must be submitted to the faculty responsible for the discipline. Theses must be attached to the dissertation.

If the cited publications have co-authors, the thesis must include a section in which co-authors state which results in the dissertation are primarily attributable to the candidate.

5.4. Review Procedure

At the public defense, the doctoral student presents the theses of the dissertation in a free lecture (maximum 30 minutes). The reviews are presented; the candidate answers the reviewers' written comments and any questions or observations raised by committee members, reviewers, and attendees.

After the discussion, the committee decides in a closed session by secret ballot, scoring 0–5; at least 60% of the available points is needed for acceptance.

The Doctoral School Council decides on awarding the degree based on the review committee's report and the scores received; the DDC gives an opinion, and then, based on the above, the UDC makes a decision.

5.5. Individual Preparation

Those wishing to obtain a degree by individual preparation must apply for the complex exam at the Doctoral School of Mathematics (in this case, completion of 90 credits is not required). The DDC decides on acceptance based on a proposal from the DSC.

Upon successful complex exam, the higher education institution recognizes the minimum credits required for eligibility for the complex exam. Upon request, additional credits may be recognized based on previously acquired knowledge and competencies.

It is not compulsory to assign a supervisor for individual preparation students. If the individual does their scientific research at the University, the doctoral school will assign a supervisor/advisor.

The fee is determined by the DDC based on the proposal of the DSC.

6. Elements of Quality Assurance

1. Continuous monitoring of doctoral students' research work and supervisors' activities.
2. Regular updating of the subject matter and content of lectures and introduction of new lectures.
3. Regular review of research topics.
4. Continuous improvement of infrastructure.
5. Inviting foreign lecturers, supporting students' travel abroad.

7. Validity and Entering into Force

These regulations enter into force on the day they are approved by the DDC based on the proposal of the DSC.

For issues not regulated in this document and its annexes, the Regulations for Doctoral Training and Doctoral Degree Acquisition at SZTE shall apply.