

Quality assurance of doctoral training and degree acquisition in the case of the Doctoral School of Earth Sciences

(Valid from October 1, 2019)

Quality Assurance Policy

The Doctoral School of Earth Sciences at the University of Debrecen is committed to maintaining high standards in research and education. To this end, it created the first version of this Quality Assurance Policy in 2014 and has been continuously developing it ever since.

The Quality Assurance Policy of the Doctoral School of Earth Sciences at the University of Debrecen aims to facilitate the review of the fundamental processes of the Doctoral School from a quality perspective and to lay the foundations for quality improvement.

The Quality Assurance Policy summarizes all the tasks and tools necessary for the continuous improvement of the quality of the processes of the Doctoral School of Earth Sciences.

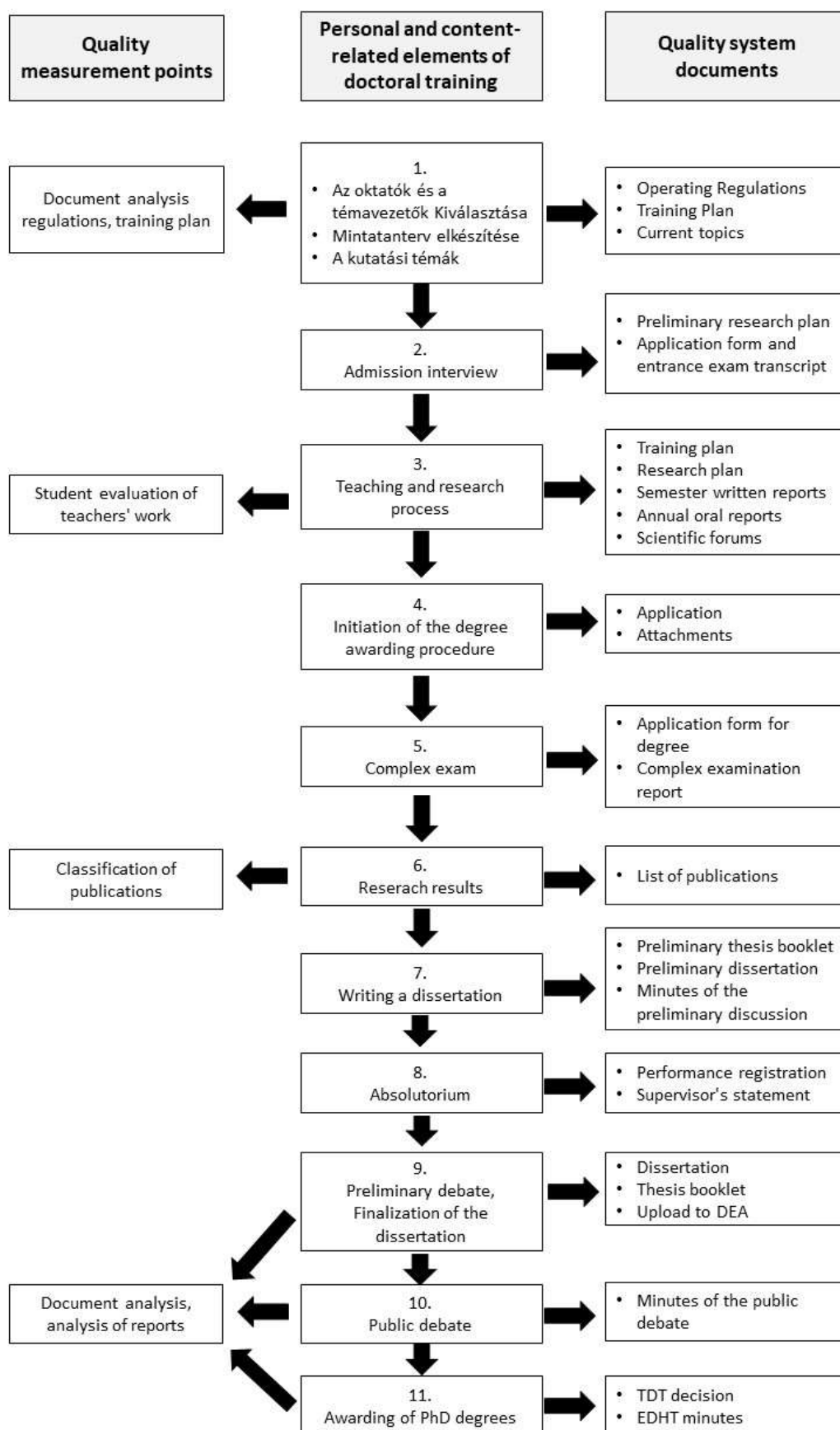
The objectives of establishing the Doctoral School (DS) quality assurance system are:

- to improve and maintain high standards of research and training,
- to conduct high-quality, effective research,
- to contribute to the high-quality fulfillment of the social obligations of the University of Debrecen,
- to increase operational efficiency,
- to increase the satisfaction of students, teachers, researchers, university staff, employers of graduates, organizations, institutions, and partners associated with the institution, and to maximize the fulfillment of their needs.

The Doctoral School of Earth Sciences takes the following into account when developing and operating its quality assurance system:

- the provisions of the Higher Education Act in force at any given time,
- the University of Debrecen's own quality assurance system,
- the requirements of the doctoral regulations (DSz) of the University of Debrecen (DE) and the regulations of the University's Doctoral Council of Natural Sciences and Informatics (TTDT) concerning doctoral training and degree acquisition,
- the resolutions and recommended criteria of the Hungarian Accreditation Committee,
- the guidelines of the Ministry of Human Resources and the Ministry of Innovation and Technology on quality assurance in higher education,
- international recommendations on quality assurance systems, with particular regard to European standards for quality assurance in higher education, the Bergen document adopted in 2015: "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (hereinafter: ESG).

Flowchart of quality assurance at the Doctoral School of Earth Sciences



Quality assurance and quality improvement based on this activity are the responsibility of all teachers, researchers, and employees, in accordance with the University's quality policy. Everyone is required to perform their job duties at a level that ensures that the results of DS are always in line with the objectives set out in the University's quality policy.

In accordance with the provisions of the University Quality Assurance Manual, from 2020 onwards, the DS Council will evaluate the annual achievement of quality objectives and set the objectives for the following year, which will be recorded in an annual report by June 30 each year.

1. Application of lecturers to the Doctoral School

The Doctoral School Council (DSC) evaluates the professional background of lecturers/researchers with academic degrees who have applied to join the Doctoral School and decides on the acceptance of their applications on this basis. The acceptance of the application is approved by the University's Doctoral Council of Natural Sciences and Informatics. The evaluation takes into account previous university teaching activities: lecturing, practical training, thesis and dissertation supervision, as well as supervision of scientific student research. The DS strives to ensure that only instructors/researchers who are habilitated at the university or who meet the university's habilitation requirements can become members of the school. During the evaluation, the DSC examines the instructor/researcher's complete list of publications and their 10 most important publications, as well as their impact on the scientific community. When applying, the applicant must also submit a research topic and/or course proposal, which is also evaluated by the DSC.

DS instructors are listed on the school's website and in the database of the National Doctoral Council (ODT), which is also a guarantee of quality through public disclosure.

2. Announcement of doctoral topics

Any DS instructor may announce a doctoral topic, and thus become a topic writer, but the Doctoral School Council (DSC) evaluates all topics and only approves those for which the intellectual and infrastructural background for research is ensured and which it considers realistic that a high-quality dissertation can be submitted within one year after the four-year training.

A key requirement for topic authors is active research activity: the indicators of their scientific publications in the five years prior to the announcement of the topic must exceed the publication requirements for obtaining a degree at the doctoral school.

The topic writer becomes the supervisor if a student applies for the announced topic, is accepted, and enrolls in the doctoral school. Each doctoral student has a supervisor who is fully responsible for guiding and assisting the doctoral student working on the topic in their studies, research work, and preparation for the doctoral degree. Co-supervision is possible in the case of training carried out within the framework of cooperation between international and domestic institutions, or in the case of interdisciplinary research topics. The head of the DS reviews the co-supervisor application before it is submitted to the TTDT. A supervisor may have a maximum of two doctoral students per academic year.

3. Admission to doctoral training

Admission to doctoral training is only possible by applying for a nationally advertised topic on the www.doktori.hu website and after a successful interview with the admissions committee.

The professional habitus points that can be obtained during the admission process are partly based on an assessment of the applicant's proficiency in the chosen topic (the admissions committee evaluates the applicant's professional knowledge, their plans for the research to be carried out during the doctoral program, and the soundness of those plans).

A prerequisite for participation in the admission exam is written confirmation of acceptance of the applicant by the supervisor and the host unit (department or external institution).

The formal requirements for admission are a degree with at least an average grade and proof of knowledge of the professional language(s) required for the discipline, as specified by the DSC.

4. Doctoral program subjects

The DSC decides on the acceptance of subjects into the program and the renewal of syllabi. The DS training plan and a detailed description of the subjects can be found on the DS website. The syllabus must be reviewed at least every three years. At the beginning of each semester, the head of the school and the secretary inform students about new courses, and during the semester, the DS secretary also draws students' attention to these in electronic letters. Academic credits can only be earned in the first two years of doctoral training, during the "training and research phase."

The supervisor is primarily responsible for helping doctoral students select their courses. The purpose of the selected courses is, on the one hand, to help students prepare for the doctoral comprehensive exam and the theoretical part of the complex exam and, on the other hand, to enable doctoral students to acquire the specific knowledge necessary for their research work. Doctoral students can choose not only from the courses offered in their program, but also from courses offered in other DS programs. This allows all DS students to access the full potential of the school.

Regularly updated, publicly available information about the doctoral school's current training plan, courses, and instructors can be found on the doctoral school's website.

Only those lecturers and researchers with academic degrees who are deemed suitable by the DSC and are invited to teach doctoral courses for a given period may become lecturers at the doctoral school. In order to maintain and improve the quality of education, DS will also introduce student feedback surveys starting in 2020.

5. Research work

The doctoral student's research work is supervised by the supervisor with full responsibility. The topics and methods of research conducted at the DS may vary, but there is a uniform requirement that the expected results of the doctoral student's research task and the quality of the research conducted by the student must be of such a standard that it can be published in an international scientific journal and presented at an international conference.

The DS periodically defines the expectations regarding the research work carried out during the doctoral program and the expected level of independence. The DS strives to ensure that doctoral students give at least one professional presentation on their research results each year. The doctoral school will, as far as possible, help students to attend a foreign university/institute where research related to their topic is being conducted. During the research, special attention is paid to the consistent enforcement and monitoring of scientific ethical requirements, which

is partly the responsibility of the supervisor, but can also be monitored by the entire DS audience through the mid-year written reports and annual oral reports. Any scientific ethical issues that may arise must be dealt with in accordance with the provisions of the Code of Ethics of the University of Debrecen.

The entire infrastructure of the departments and institutes is available to all doctoral students for effective research work. Depending on usage, the DS also contributes to this from state funding allocated to doctoral training. A significant portion of the state funding allocated to doctoral training can be managed by the program in proportion to the number of students enrolled in the program. At the same time, there have been several instances where we have provided adequate coverage for larger investments without distribution.

6. Monitoring

The DSC evaluates students' academic and research performance and progress on the basis of written work reports, professional seminars, and annual oral reports. The work report to be submitted each semester contains summary indicators of study and research results (including publications, conference and seminar presentations related to the doctoral topic) in accordance with the form available for download from the doctoral school's website. Before submission, the report is reviewed by the supervisor and the program director, and their positive feedback is then submitted to the DSC for evaluation. During the oral reports held at the end of each academic year, students must present their progress in the current year and their plans for the future to the members of the DSC and the DS instructors. The presentations are open to everyone, thus providing an opportunity for the public to learn about and evaluate the topics and students. During the end-of-year reports, there is an opportunity to discuss both current and systemic issues in a more informal setting.

At the end of the fourth semester of the full-time and part-time doctoral programs, as a conclusion to the training and research phase of the program and as a prerequisite for beginning the research and dissertation phase, students must pass a comprehensive exam that measures and evaluates their academic and research progress. The comprehensive exam consists of two main parts: one part assesses the candidate's theoretical knowledge, while the other part assesses the candidate's scientific progress. Doctoral students may only enroll in the fifth semester of the doctoral program after successfully completing the comprehensive exam.

The DSC monitors the career paths of students who have obtained their degrees. The results are published in the periodic self-evaluations of the doctoral school in the database at www.doktori.hu. The self-evaluation also includes other statistical data related to the program (student enrollment figures, average time to degree completion, degree completion rate, etc.). The MTMT publication and citation registration system, which remains open to students even after graduation, provides particularly good opportunities for tracking the further activities of graduates.

7. PhD degree publication requirements

Within the DS, the programs operate under a unified system under the direction of the Doctoral School Council, which has also established the requirements for obtaining a doctoral degree in accordance with the Doctoral Regulations. In order to obtain the degree, taking into account the specific characteristics of the field, it is necessary to publish in impact factor or peer-reviewed and refereed journals and volumes. The accepted referencing organizations are as follows:

Scopus, EBSCO, ProQuest, GeoRef. If a given publication is not registered in any of these centers, it cannot be accepted as a publication in the PhD degree acquisition process.

The minimum required publication performance:

- at least two publications (accepted for publication) in foreign peer-reviewed and refereed journals or volumes, or
- one publication (accepted for publication) in a foreign peer-reviewed and refereed journal or volume, or two publications (accepted for publication) in domestic peer-reviewed and refereed foreign-language journals.

The degree requirements of the doctoral school are approved by the Doctoral Council of the University of Debrecen. The Doctoral Council is responsible for ensuring that high-quality dissertations are produced in all disciplines accredited at the University of Debrecen. The publication requirements of the Doctoral School of Earth Sciences are also published on the website www.doktori.hu.

8. Degree award procedure

In the degree award procedure, the doctoral school follows the points described in the Doctoral Regulations and the TTDT Regulations. After passing the comprehensive exam, the student enters the degree award procedure, so applying for the comprehensive exam also means applying for the degree award procedure.

The doctoral dissertation must be submitted for preliminary discussion before submission. During the discussion, the dissertation is evaluated by an opponent with at least a doctoral (PhD) degree, as well as the chair of the committee and a committee member. The preliminary discussion committee is authorized to decide whether the candidate's dissertation is suitable for submission. The proceedings of the discussion, and in particular the opinions and findings relating to the modification of the thesis, shall be recorded in minutes. The opponent's opinion shall be attached to the minutes. In the event of a significant revision of the thesis, the preliminary discussion shall be repeated.

In other steps of the degree process, the doctoral school ensures compliance with its advertising obligations:

- it announces the comprehensive exam/preliminary discussion/defense on the doctoral school's website, on the notice boards of the DE Institute of Earth Sciences, and in an electronic circular to the available professional community,
- announces the doctoral defense in the National Doctoral Database on the website www.doktori.hu,
- the TTDT publishes the comprehensive exam/complex exam and the defense in the newsletter of the Faculty of Natural Sciences and Technology.

The DS also follows the provisions of the Doctoral Regulations and the TTDT regulations when conducting the public debate/defense. The TTDT is responsible for organizing the defense.

When the defense is announced, the dissertation, the thesis booklet in Hungarian and English, and the candidate's list of publications in MTMT will be made public on the website of the DS and the National Doctoral Council database at www.doktori.hu. Upon announcement, the

dissertation and thesis booklet will be placed in the electronic archive of the DE Library (DEA). This is the responsibility of the doctoral candidate. One copy of the dissertation and one copy of the thesis booklet will be placed in printed form in the DE Library.

After the dissertation has been submitted, the members of the Review Committee will receive the dissertation and thesis booklet in both printed and electronic form. The members of the Review Committee will receive the opponents' opinions in electronic form after both reviews have been received, and the candidate's responses to these opinions will be received in electronic form at least one week before the defense. When the public debate is announced, the dissertation and thesis booklet will be made public on the www.doktori.hu website, which will also be highlighted on the doctoral school's website.

The thesis sent to the reviewers cannot be modified afterwards. If the Review Committee finds any professionally incorrect statements or rejects any points of the thesis, this shall be noted in the minutes of the committee.

**The Council of the Doctoral School of Earth Sciences
approved this at its meeting on September 15, 2019.**