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

(Valid from the 2025/2026 academic year)

# Quality assurance regulations

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 these Quality Assurance Regulations in 2014 and has been continuously developing them ever since.

#### Introduction

The purpose of the Quality Assurance Policy of the Doctoral School of Earth Sciences at the University of Debrecen is to assist in the quality review of the fundamental processes of the doctoral school and to lay the foundation 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 purpose of establishing a quality assurance system for the doctoral school is to:

- to improve and maintain the high standard 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 the efficiency of operations,
- 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 for Natural Sciences and Engineering (TTDT) concerning doctoral training and degree acquisition,
- the resolutions and recommended criteria of the Hungarian Accreditation Committee,
- the guidelines of the Ministry of Culture and Innovation 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).

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 the DI 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 Council of the Doctoral School of Earth Sciences 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 of Earth Sciences

The academic background of applicants with academic degrees who apply to become instructors at the Doctoral School of Earth Sciences is evaluated by the Doctoral School Council, which then decides whether to accept the application. The evaluation takes into account previous university teaching activities: lecturing, practical training, thesis and dissertation supervision, and supervision of scientific student research. The doctoral school 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 doctoral school council 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 instructor/researcher must also submit a research topic and/or course proposal, which is also evaluated by the doctoral school council.

The teachers of the doctoral school 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 access.

#### 2. Announcement of doctoral topics

Any instructor at the doctoral school may announce a doctoral topic, and thus become a topic writer, but the doctoral school council evaluates each topic 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 set by the doctoral school for obtaining a degree.

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 doctoral school 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 after applying for a nationally advertised topic on the <a href="www.doktori.hu">www.doktori.hu</a> website and passing an interview with the admissions committee. The professional habitus points that can be obtained in the admission process partly evaluate

proficiency in the chosen topic (the admission committee evaluates the candidate's professional knowledge, plans related to 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 a medium grade and proof of knowledge of the professional language(s) required for the discipline, as specified in the Operating Regulations of the Doctoral School of Earth Sciences.

# 4. Doctoral program subjects

The doctoral school council decides on the acceptance of subjects into the program and the renewal of topics. The curriculum of the Doctoral School of Earth Sciences and a detailed description of the topics of the subjects can be found on the doctoral school's website. The syllabus shall be reviewed at least every three years. Credits can only be earned during the first two years of doctoral training, in the "training and research phase."

The supervisor is primarily responsible for assisting the doctoral student in selecting courses. The purpose of the selected courses is, on the one hand, to help 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 own program, but also from courses offered in other programs of the doctoral school. This allows all students of the doctoral school to access the full potential of the school.

Regularly updated, publicly available information on 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 doctoral school council and are invited to teach doctoral courses for a given period may be lecturers at the doctoral school.

#### 5. Research work

The research work of doctoral students is supervised by their thesis supervisors, who bear full responsibility for it. The topics and methods of research conducted at the doctoral school 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 Doctoral School of Earth Sciences periodically defines the expectations for research work carried out during doctoral training and the expected level of independence. The doctoral school strives to ensure that doctoral students give at least one professional presentation on their research results each year. The doctoral school helps students, as far as possible, 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 doctoral school community through the mid-year written reports and annual oral presentations. 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 doctoral school also contributes to this

from the 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 occasions when we have provided adequate coverage for larger investments without distribution.

### 6. Monitoring

The doctoral school council evaluates the academic and research performance and progress of students on the basis of written work reports, professional seminars, and annual oral reports. The work report to be submitted each semester contains the summary indicators of study and research results (including publications, conference and seminar presentations related to the doctoral topic) according to the form available on the doctoral school's website. Before submission, the report is reviewed by the supervisor, and after receiving positive feedback, it is submitted to the doctoral school council 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 doctoral school council and the doctoral school's 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 presentations, there is an opportunity to discuss both current and systemic issues in a more informal setting.

At the end of the fourth semester of 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 doctoral school strives to follow the career paths of students who have obtained their degrees. The MTMT publication and citation registration system, which remains open to students even after graduation, provides particularly good opportunities for monitoring the further activities of graduates.

## 7. PhD degree publication requirements

Within the Doctoral School of Earth Sciences, 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.

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.

The prerequisite for publication is based on the following TTDT regulation:

The minimum requirement generally expected of a candidate's scientific work at the time of submission of the dissertation is two articles (accepted for publication) in a foreign language, published in internationally refereed journals ranked by Scimago.

The Doctoral School of Earth Sciences supplements the above requirement with the following special requirements:

- One of the two articles published in Scimago-ranked journals must be published in a journal with a Q2 rating (at the time of submission), and the candidate must be the first, last, or corresponding author.
- Publications that receive a rating of 0 in the Norwegian list based on the list of journals engaging in objectionable practices on the MTMT website (https://www.mtmt.hu/) in the year of publication cannot be taken into account.

#### 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 is also 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 two opponents with at least a doctoral (PhD) degree and the chair of the committee. The preliminary discussion committee is entitled 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 opinions of the opponents 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 shall ensure compliance with its advertising obligations:

- it shall announce the comprehensive examination/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 doctoral school also follows the provisions of the Doctoral Regulations and the TTDT Regulations when conducting the public discussion/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 the MTMT become public on the website of the doctoral school 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. A printed copy of the dissertation and thesis booklet will be placed in the DE Library.

After the thesis has been submitted, the members of the Review Committee will receive the dissertation and the thesis booklet in electronic form and, upon request, in printed form. The members of the Review Committee will receive the opinions of the opponents after both reviews have been received, and the candidate's responses to these opinions will be received in electronic form no later than 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 dissertation sent to the reviewers cannot be modified afterwards. If the Review Committee objects to professionally incorrect statements or does not accept thesis points, this shall be noted in the minutes of the committee.

# The Council of the Doctoral School of Earth Sciences Approved at its meeting on September 8, 2025