

Antal Kerpely Doctoral School of Materials Science and Technologies

Quality assurance of doctoral training and degree acquisition

The principles and methods of quality assurance of doctoral training and degree acquisition are primarily discussed in detail in the Doctoral Training and Degree Acquisition Quality Assurance Regulations of the University of Miskolc and are set out in Annex 5 of the Operating Regulations of the Antal Kerpely Doctoral School of Materials Sciences and Technologies. The enforcement of these principles is regularly monitored by the Discipline Doctoral Council (TDT) - based on the report of the Doctoral Study Committee (TB).

1. Announcement of doctoral topics

The doctoral school requests research topic proposals every semester (September and March) from the organizational units participating in the training and from cooperating institutions. The TDT evaluates all topics and only contributes to the announcement of those for which the intellectual and infrastructural background of the research is ensured, and it is considered realistic that a high-quality dissertation can be submitted within 3-4 years.

Topic supervision at an external research site is possible in institutions that have signed a cooperation agreement with the doctoral school, where the legal relationship for the employment of the student is settled and the rights and obligations of the student are clearly defined.

The topic supervisors are the most outstanding lecturers of the Faculty of Materials and Chemical Engineering, who are constantly present in scientific public life, publish in prestigious journals, and present at international conferences.

The announced scientific topics are related to the international trend in the scientific field.

When appointing and authorizing a supervisor, the Doctoral Council of the Science Branch reviews whether there are any publications among the publications that it would accept as a condition for the defense of doctoral students in the degree-granting procedure; if there are none, it does not support the supervision.

The Doctoral Council of the Science Branch insists that at least the responsible supervisor of a full-time scholarship student must be a lecturer, researcher at the University of Miskolc, or officially belong to an institute.

2. Admission to doctoral training

After a successful admissions committee interview, you can only enter the doctoral training by applying for a nationally announced application on www.doktori.hu. The doctoral school publishes the call for applications every semester (December and May).

The purpose of the oral admission (January and June) is to check the appropriate preparation and make a ranked admission proposal. Admission takes place before the TDT appoints the Admissions Committee. The formal requirement for admission is a diploma with at least a good grade and proof of knowledge of the professional language required for the discipline, as prescribed by the TDT. Applicants with a bachelor's degree who have outstanding academic results and undertake to participate in a master's degree in parallel may apply for doctoral training. 2

When appointing the admission committee, the Scientific Doctoral Council takes special care to ensure that the supervisors of new doctoral students cannot be members, but that all subject areas are represented.

During the admission procedure, the most suitable candidates are admitted after a correct assessment of the candidate's performance so far.

3. Doctoral training

The lecturers of the PhD subjects are highly qualified teachers and researchers with scientific degrees. The teachers at the doctoral school appear in the school's ODT database, and if someone teaches at more than one doctoral school, they declare on the ODT data sheet which doctoral school they belong to, in what percentage.

The TB reviews the announced subjects and their topics at the beginning of each academic year and, if necessary, proposes modifications.

The Doctoral School's Training Rules apply to those entering after September 1, 2016. In addition to the mandatory subjects, the Council introduced two optional, mandatory subjects (Research Theory, Scientific Database Management) worth 2 credits, which help doctoral students in their everyday activities and in achieving their scientometric results.

When determining the conditions for admission to the complex exam, it is important that the supervisor also participates responsibly in the evaluation of the doctoral student's work, which is why it was introduced that he or she must make a written statement beforehand and also orally during the exam.

The condition for defending the dissertation is the publication of the results in prestigious journals, which is why the supervisor, and the host institutions help and support the publication activities of doctoral students and their participation in scientific conferences.

The student proves the progress of scientific activity by holding a research seminar to be organized every semester. The training plan has been designed so that the entire fourth semester will help doctoral students prepare for the complex exam, therefore, no separate research seminar will be held in that semester, and they must also fulfil their subject obligations by the end of the third semester.

The Training Procedures regulate the procedural issues related to the complex exam.

The dissertation reviewers and the review committee members are outstanding scientists in the field. Here, as in the general steps of the doctoral process, an important factor is the examination of conflicts of interest and that the members carry out active research and development activities in the given scientific field.

4. Monitoring

Electronic data sheets are of particular importance as the main tool for monitoring work. The registration of the achieved results is thus ensured, and requests (leaving a year, postponing an exam, enrolling in a course, changing a course, requesting a final exam, accepting a publication, final exam, language exam, workshop discussion, appointing a review committee, etc.) are also documented. This allows for objective and up-to-date management of training and degree-earning matters. In addition, it is of course expected that the supervisor is also aware of the

doctoral student's requests and achievements; therefore, all student requests and submissions are only discussed by the Doctoral Council of the Science Branch if they are countersigned by the supervisor.

The Kerpely Antal Doctoral School is based on the graduate training of the Faculty of Materials and Chemical Engineering of the University of Miskolc; the Faculty also maintains close contact with its graduate engineers through the established practice of 3

meetings, and even more so with those who have obtained their degrees. In terms of maintaining contact, former doctoral student supervisors and those members of the Doctoral School who came into contact with the doctoral student during the training have a special role to play. The purpose of this contact is twofold: those who have already obtained a PhD must be won over to support our doctoral training beyond their postdoctoral activities; and those who continued their studies at the Doctoral School before 2016 and are still working on their dissertations despite having their absolutorium must be won over to continue their activities.

5. Publication requirements for the PhD degree

The general requirements for the doctoral degree are regulated in detail in Section 17 of the Kerpely Antal Doctoral School Operating Regulations.

The Doctoral Council of the University of Miskolc approves the doctoral school's degree-awarding requirements. The doctoral Council is responsible for ensuring that high-quality dissertations are produced in all disciplines and accredited by higher education institutions. The publication requirements of the doctoral schools are also published on www.doktori.hu.

6. Degree-awarding procedure

The rules for the degree-awarding procedure are described in detail in Chapter V of the Doctoral Training and Doctoral Degree-Awarding Regulations of the University of Miskolc.

The doctoral dissertation must be submitted for a workshop debate before submission. In the debate, the thesis is evaluated by an external and an internal opponent with at least a doctoral degree. The course of the discussion and, in particular, the opinions and findings related to the modification of the dissertation must be recorded in the minutes.

After the dissertation is submitted, the reviewers receive the dissertation and the thesis booklet in electronic form. The members of the Evaluation Committee receive the opponents' opinions after the receipt of both reviews, and the candidate's responses to them in electronic form, no later than one week before the defense.

When the public discussion is announced, the dissertation and the thesis booklet become public on www.doktori.hu.

The dissertation sent to the reviewers cannot be modified afterwards. If the Evaluation Committee objects to professionally incorrect statements or does not accept thesis points, this will be included in the minutes of the public defense.

8. Closing remarks

The regulations aim to achieve the following quality assurance principles:

Professional control

The control of the scientific public must be enforced throughout the entire process of doctoral training and degree acquisition.

Publicity

The main phases of the quality assurance system should be widely publicized to the professional and scientific public. 4

Feedback

The lecturers, supervisors and members of the various bodies of the doctoral school participating in doctoral training should receive continuous feedback on the quality of their activities and have the opportunity to provide feedback on their experiences.

Individual responsibility

It should be clearly clarified who among those participating in doctoral training has what task and why is responsible.

Documentation

Documentation should be prepared for all decision points related to doctoral training and degree acquisition. The operation of the quality management system should impose only a minimal administrative burden on teachers and researchers involved in training and degree-granting procedures.