

BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS

Faculty of Chemical Technology and Biotechnology, George A. Olah Doctoral School

Quality Assurance Plan

The principles and methods of quality assurance for doctoral education and degree conferral are primarily set forth in the BME Code of Doctoral Studies and Habilitation (BME DHSZ), the Code of Studies and Exams of BME (BME TVSZ), and the George A. Olah Doctoral School Rules of Operation. Below, we outline requirements that partly overlap with and partly go beyond these regulations, without, however, addressing the relevant legislation (primarily the repeatedly amended Government Decree No. 387/2012 (XII. 19.) on Higher Education and its amendment by Government Decree No. 266/2016 (VIII. 31.), as well as the quality assurance elements appearing in the BME DHSZ (BME DHSZ June 24, 2013, amended February 29, 2016), and the BME TVSZ.

The present quality assurance regulations of the George A. Olah Doctoral School of the Faculty of Chemical Technology and Biotechnology at BME (hereinafter: Doctoral School) aim to ensure that the quality of the Doctoral School as a whole remains stable and at a high level through the regulation of six key phases of doctoral training and degree conferral. These key phases are: announcement of doctoral topics, admission to the doctoral program, doctoral program courses, monitoring and tracking student progress, requirements for obtaining the PhD title, and the PhD degree conferral procedure. In each of these key phases, the supervisor plays a significant role in terms of content; as they are in daily contact with the doctoral student, they can directly and effectively guide their progress.

Call for Doctoral Thesis Proposals

Twice a year (typically in October and March), the Doctoral School solicits PhD thesis proposals from the organizational units participating in the program, as well as from partner institutions.

A doctoral supervisor may be anyone whose candidacy and proposed research topic are approved by the Doctoral School Council (DIT). The criteria for thesis supervision are otherwise governed by Sections 10(3) through (10) of the DHSZ. In the case of an external supervisor, the announcement of the topic requires a statement of acceptance from the head of the external institution under contract with the Doctoral School, as well as the appointment of an internal consultant. Supervisors are expected to be actively engaged in research: the metrics of their scientific publications from the five years preceding the announcement of the topic must, on their own, significantly exceed the publication requirements set by the Doctoral School for degree conferral, and they must have at least two years of professional experience since obtaining their doctoral degree. A supervisor may supervise the work of no more than three doctoral students at the same time. The DIT may grant an exemption from these conditions only with the approval of the University Habilitation Committee and Doctoral Council (EHBTD).

Regularly updated public information regarding doctoral topics and supervisors approved by the DIT, as well as admission requirements and the list of students admitted to the Doctoral School, is available on the Doctoral School's website.

Admission to the School

Twice a year, at times specified by the DIT (usually in March and October), the doctoral school issues a call for applications, which includes the research topic descriptions as well as the formal and substantive requirements for admission to the doctoral program. The purpose of the admission interview (usually in June and December) is for the admissions committee to assess the candidate's preparedness and to prepare a ranked admission recommendation. A prerequisite for participating in the admission exam is written confirmation of acceptance from the supervisor and the host unit (department or external institution). The admission procedure is governed by Section 13 of the BME DHSZ and the George A. Olah Doctoral School Rules of Operation.

The admission process is overseen by numerous individuals and bodies within the Doctoral School and the Faculty: Based on the report of the Admissions Committee, the DIT submits a recommendation to the Dean of the Faculty regarding admission and the awarding of state scholarships. Admission decisions are made by the Dean of the Faculty.

Doctoral Program Courses

The DIT decides on the inclusion of courses in the program and on updates to the course offerings. The curriculum must be reviewed at least every three years. The program is governed by the George A. Olah Doctoral School Training Plan and the BME TVSZ.

The DIT continuously monitors the qualifications of the Doctoral School's Faculty: Only those instructors and researchers holding an academic degree may serve as faculty members of the Doctoral School who, upon the recommendation of the Head of the Doctoral School, are deemed by the DIT to be suitable for the given period to perform teaching, research, and thesis supervision duties within the framework of the Doctoral School.

Regularly updated, publicly available information regarding the Doctoral School's current curriculum, courses, and faculty members can be found on the Doctoral School's website.

Monitoring and Assessment of Student Progress

Supervisors and external workplace supervisors continuously and regularly monitor students' academic performance and progress. In addition, the DIT evaluates doctoral students annually based on their progress reports (BME TVSZ §3). The progress report, which must be submitted each semester using the form available for download from the Doctoral School's website, includes summary indicators of academic and research results (including publications, conference presentations, and seminar presentations related to the PhD topic).

The DIT also specifically monitors those aspects of students' academic performance that will be required to initiate the degree conferral process.

Based on the DIT's evaluation, the Dean of the Faculty may transfer state-funded students who are not making adequate progress in their studies or research to fee-paying programs (BME TVSZ §4).

Requirements for the PhD Degree

The general requirements for the doctoral degree are governed by Section 15 of the BME DHSZ. Requirements that go beyond these are contained in the set of requirements adopted by the HBDT and published on the Doctoral School's website.

The HBDT continuously reviews the subjects of the comprehensive and complex examinations and, through its members' participation in the examinations, monitors the quality of the examinations. The HBDT oversees the appointment of the Comprehensive Examination Committees and the Complex Examination Committees.

Degree Awarding Procedure

The rules governing the degree award procedure are set forth in detail in Sections 16–24 of the BME DHSZ. The doctoral dissertation must be submitted for a departmental defense prior to submission. During the defense, the dissertation is evaluated by two opponents, each holding at least a doctoral degree. The proceedings of the defense, and in particular the opinions and findings regarding amendments to the dissertation, must be recorded in the minutes. The opinions of the two opponents are attached to the minutes. The participants in the workplace defense shall, by majority vote, determine and record in the minutes that the dissertation (possibly with minor changes discussed during the defense) is acceptable for submission. In the event of a significant revision of the dissertation, the workplace defense must be held again. The candidate must attach a list of the changes made to the revised dissertation or must state that the proposed changes have been rejected. After the dissertation is submitted, the members of the Evaluation Committee appointed by the HBDT receive the collection of thesis materials. The identities of the opponents are not disclosed until the reviews are completed. The members of the Evaluation Committee receive the reviewers' opinions after both reviews have been submitted, and the candidate's responses to these opinions no later than one week before the defense. Upon the announcement of the public defense, the dissertation and the thesis abstract become publicly available on the Doctoral School's website.

Concluding Remarks

Through certain provisions of the Doctoral School's quality assurance regulations, the following quality assurance principles are to be given priority:

- (1) *The principle of professional oversight.* Throughout the entire process of doctoral training and degree conferral, oversight by the international and national professional and scientific community must be ensured.
- (2) *The principle of adherence to scientific ethics requirements.* The decrees of the Committee on Research Ethics of the Hungarian Academy of Sciences must be upheld during the development and operation of the quality management system.
- (4) *The principle of transparency.* The main phases of the quality assurance system must be widely accessible to the professional and scientific community.
- (5) *The principle of feedback.* Faculty members, supervisors, and members of the various councils of the doctoral school involved in doctoral education shall receive continuous feedback on the quality of their work and shall have the opportunity to provide feedback on their experiences.

(6) *The principle of quality focus.* Through the establishment and operation of the quality management system, we aim to ensure that the standards of both our students and our faculty continuously rise in relation to themselves and their environment, while at the same time making humility toward science an integral part of their values and initiative and creativity one of the cornerstones of their thinking.

(7) *The principle of intellectual property protection.* The development of the quality management system must also contribute to ensuring that the university's doctoral programs remain fully aligned with the intellectual property protection efforts of the European Union and Hungary.

(8) *The principle of individual accountability.* Establishing and operating a research school is a team effort, but it can only be successful if it is clearly defined who is responsible for what tasks and has what scope of responsibility in the training and research process.

(9) *The principle of documenting processes.* Documentation must be prepared for all decision points related to doctoral education. Verifying this documentation is a fundamental task of the quality management system. An important objective within the doctoral program as a whole is to ensure that the administrative burden on faculty members involved in the program does not increase during the development and operation of the quality management system.

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