
Statutes of the Doctoral School of Techno-Economics at the Faculty of Mechanical Engineering and Economic Sciences at Graz University of Technology

as of: 14/11/2017

Legal validity remains restricted to the German original

(1) Scope of the Doctoral Programme in the Doctoral School of Techno-Economics

The doctoral programme in the Doctoral School of Techno-Economics relates to scientific problems of the technical and economic sciences in the field of mechanical engineering and economic sciences and closely related subject areas. The doctoral programme develops advanced abilities of the candidates, not only in the field of their subject of research, but also in related areas. The doctoral programme educates students in close relation to current research.

(2) Admission of Graduates of Studies of Economic Sciences

Pursuant to § 2 (1), item 2. of the doctoral curriculum, graduates of studies of economic sciences may be admitted to doctoral studies in the present doctoral school. In accordance with the candidate's supervisor, the Dean of Studies in charge may require attendance of up to 16 weekly hours or 24 ECTS of instructional classes on engineering subjects additionally to the regular 14 weekly hours in the frame of the curricular part of the studies (see (12) and (13) below).

(3) Academic Degree

Graduates of the doctoral programme offered by the Doctoral School of Techno-Economics are awarded the degree of "Doctor of Engineering Sciences", in Latin "Doctor technicae", abbreviated "Dr. techn".

(4) Objectives and Subject-Specific Qualification Profile

Objectives of the doctoral programme are to develop skills for independent scientific research, advanced knowledge, as well as abilities of the students for presentation and defence of results in the related field of research of business engineering and engineering science and related areas.

Graduates of the doctoral programme in Techno-Economics have in-depth knowledge of the area of their PhD thesis, extensive experience with the application of scientific methods in engineering and economic sciences, skills in presenting and defending results, and the ability for team work.

(5) List of Member Institutes at Graz University of Technology

The Doctoral School of Mechanical Engineering consists of the following institutes:

3360 Production Science and Management
3710 Industrial Management and Innovation Research
3720 General Management and Organisation
3730 Business Economics and Industrial Sociology
3740 Engineering and Business Informatics

(6) Inter-University Cooperation

Not applicable to this doctoral school.

(7) Structure and Tasks of the Coordinating Team

The Coordinating Team of the Doctoral School of Techno-Economics is structured as follows: (Professors:Mid-level faculty members:Doctoral students) as (1:1:1). A deputy must be nominated for each team member. The team appoints a chairperson from among its members.

The tasks of the Coordinating Team are defined by § 3(4) of the doctoral curriculum. Among others, the main tasks of the team are the regular scheduling of seminars to present results and progress of doctoral projects that are currently being worked on at the doctoral school. Such events can either be held at the individual institutes or across several institutes, such as the “Research Colloquium on Techno-Economics”.

(8) Guidelines for the Supervision of Doctoral Candidates at the Doctoral School of Techno-Economics

As a rule, supervisors of doctoral candidates are habilitated lecturers at the institute to which the doctoral student is allocated. An exchange at regular intervals between the doctoral student and his/her supervisor based on progress reports provided by the doctoral student shall be agreed upon in a written form at the beginning of the cooperation and adhered to throughout. A copy of this written schedule must be presented to the head of the doctoral school.

The doctoral supervisor is expected to support and challenge the doctoral students. The support consists, for instance, in targeted, timely feedback on results presented, in the mediation of subject-specific contacts inside and outside the university, and in opportunities for representing interim and final results. Should a doctoral student fail to present progress reports and results for a prolonged period of time, the supervisor requires the reports and points out the consequences of slow progress.

(9) Guidelines for the Assessment of the PhD Thesis

In accordance with the regulations of the doctoral curriculum, the primary and secondary assessor of a PhD thesis completed at this doctoral school must not be employed at the same institute. It is recommended to involve a competent colleague from a different university as the second assessor. The doctoral school provides a template for the thesis assessment.

(10) Publication Guidelines at the Doctoral School of Techno-Economics

The Doctoral School of Techno-Economics requires doctoral candidates to publish approximately two articles in international journals prior to completing their doctoral studies in basic research areas. In case of applied research the Doctoral School requires doctoral candidates to publish a minimum of two articles at subject-specific, peer-reviewed conferences or in subject-specific journals. Articles must be either submitted, accepted for publication or published.

(11) Instructional Classes in the Doctoral Programme

The doctoral programme offered by the Doctoral School of Techno-Economics includes 14 semester course hours (SWS) of instructional classes in three modules. The modules are structured as follows:

- “Subject-specific Basic Courses”, as outlined in section (11) below: 8 semester course hours;

- “Scientific Methods and Communication”, as outlined in section (12) below: 4 semester course hours, 2 of which must be the doctoral seminar
- “Exclusive Tutorial”, as outlined in section (13) below: 2 semester course hours.

(12) Subject-Specific Basic Courses

Subject-specific basic courses are selected by the doctoral candidate in close consultation with his/her supervisor from the portfolio offered by Graz University of Technology. The instructional classes portfolio is subject to approval by the Dean of Studies. The selected subjects must correspond as closely as possible to the scope of the specific doctoral research project. The goal is to provide the doctoral candidates with the best possible level of qualification.

The doctoral school recommends courses from § 5a of the master’s curriculum in Mechanical Engineering and Economic Sciences and in Production Science and Management. Courses completed in the graduation of a doctoral candidate (e.g. master’s programme) are not eligible as subject-specific basic courses.

In the interest of a broad basic education at a high level, students are strongly discouraged from choosing courses at the supervisor’s institute only.

(13) Courses in the field of “Scientific Methods and Communication”

The instructional classes in the field of “Scientific Methods and Communication” aim to provide the theoretical knowledge and practical skills for developing results in research with scientific methods, and to present and defend these results, as in the following courses.

Examples of courses in the field of Scientific Methods and Communication

- FO3 (internal training): Scientific Proposal and Paper Writing, 1 semester course hour
- FO5 (internal training): Describing and Presenting Scientific Issues, 1 semester course hour
- 940.930 How to Find Scientific Literature, 2 semester course hours
- 501.101 (Karl-Franzens University): Introduction to Scientific Theory I, 2 semester course hours
- 501.181 (Karl-Franzens University): Introduction to Scientific Theory II, 2 semester course hours

- FA2 (internal training): Leading and Developing People, 1 semester course hour
- 940.902 Successful Rhetoric and Professional Presentation Skills, 2 semester course hours
- 940.942 Communication Styles, Discussion Techniques and Rhetoric, 2 semester course hours
- 940.940 Successful Team Work in Projects, 2 semester course hours
- 940.941 Conflict Management, 2 semester course hours
- 940.965 Intercultural Social Competence for Business, 2 semester course hours

Upon written application, the Dean of Studies may accept other courses, subject to their content.

The doctoral seminar (2 semester course hours) is another element of the classes of this doctoral programme.

(14) Exclusive Tutorial

This is an opportunity for one-to-one engagement with the student's work offered by the supervisor and entails the study and discussion of presented concepts, preliminary results, formulations etc. and a concrete feedback from the supervisor.

(15) Composition of the Board of Examiners for the Thesis Defence

As a rule, the board of examiners for the thesis defence consists of the Dean of Studies for Mechanical Engineering and Economic Sciences course (chairperson), the supervisor and primary assessor of the PhD thesis, and an additional, habilitated university lecturer who may, but does not have to, be the second assessor of the PhD thesis.

(16) Thesis Defence

As a rule, in the thesis defence the doctoral candidate presents his/her research work completed and the content of his/her PhD thesis, e.g. the scientific problem formulation, the selected research methodology, the areas of emphasis and the main results. Furthermore, in the examination, questions on the PhD thesis and its presentation, as well as closely related subject areas, are discussed. The thesis defence is open to the public. In the thesis defence, only members of the examination board are authorised to ask questions.

(17) Confidentiality Agreements

In many cases of applied research, the doctoral research project is financed in cooperation with industrial partners who usually require confidentiality of the results achieved in the project and documented in the PhD thesis. In such cases, access to the PhD thesis may be restricted by mutual agreement between the doctoral candidate, his/her supervisor and the industrial company in question, ensuring confidentiality for a period of at maximum four years time. Despite this agreement, in accordance with section (9), all partners should have the interest to publish the results of the PhD thesis to an acceptable extent. Any confidentiality agreement should regulate the doctoral candidate's right to present results at conferences and at the doctoral seminar. Restricting the access to a PhD thesis is subject to the approval by the Dean of Studies.

On behalf of the Coordinating Team
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