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DOCTORAL STUDY CODE FOR THE FACULTY OF ELECTRICAL ENGINEERING OF THE CZECH TECHNICAL UNIVERSITY IN PRAGUE

This internal regulation of the Faculty of Electrical Engineering (hereinafter referred to as "FEE") provides details of doctoral degree study programs accredited at FEE, in accordance with Art. 20 of the Study and Examination Code for Students of the Czech Technical University in Prague (hereafter "CTU").

Article 1

1. **Definitions**

In this regulation, the following abbreviations and terms are used:

Doctoral student – a student registered in a doctoral study program

DS – Doctoral Study

DSP – Doctoral Study Program

Impact factor journal – a journal in the SCI–Expanded database

ISP – Individual Study Plan

BBB - Branch Board for a Study Branch

BBP – Branch Board for a Doctoral Study Program

OSR - Office for Science and Research

SDE – State Doctoral Exam

BC – Bursary Code of the CTU

SEC – Study and Examination Code for Students at CTU

Article 2

Organization of Study in the Doctoral Study Program¹

- 1. The organization of study in DSP is laid down by Art. 19 of SEC.
- 2. Unless stated otherwise by the head of the supervising department, full-time doctoral students are to be present at their workplace in the extent common for academic staff.
- 3. Following the supervisors' instructions, doctoral students fulfil their responsibilities set by the ISP, perform scientific work, prepare for prescribed exams and work on their dissertations.
- 4. The head of the supervising department determines the extent and mode of practice-teaching by the approval of the supervisor.
- 5. Doctoral students are obliged to report to the OSR in order to discuss their study matters, if invited by the Dean, the Vice-Dean for Doctoral Study and Research, the Head of BBB, or the supervisor. If a doctoral student repeatedly fails to report without a sufficient apology in written form, despite having been provably called upon for the meeting, and the result is that the discussion of their study matters cannot be performed for more than 30 days through the fault of the doctoral student, the Dean may end their studies on the grounds of neglect of

¹ In comparison with SEC, this article more precisely defines the roles of supervisors (they are responsible for the scientific job content of a doctoral student and for ISP fulfilment) and the heads of supervising workplaces (they are responsible for labour-law duties and for practice-teaching performance).

responsibilities.

6. The contents of forms used in DS are to be determined by the Dean by means of a regulation.

Article 3

Scholarship

- 1. Doctoral students in full-time DS, who properly fulfil ISP responsibilities, are entitled to be awarded a doctoral scholarship in accordance with § 91 paragraph 5 Act No. 111/1998 Coll. on Higher Education Institutions, and BC. The scholarship is provided in the claimable component laid down by the Rector as per Art. 6 paragraphs 1 and 2 of BC, or as the case may be, in the non-claimable component awarded by the Dean for outstanding results in teaching and creative activities as per Art. 6 paragraphs 1 and 3 of BC.
- 2. More scholarships (specific, social, accommodation scholarships) may be awarded and funded from sources specified by Art. 2 paragraph 2 of BC.

Article 4

Supervisors and Individual Study Plan

- 1. The role of supervisors, their rights and responsibilities are laid down by Art. 23 of the SEC.
- 2. Requirements for the expertise of supervisors may be determined by the Dean by means of a regulation after debating it in the FEE Academic Senate in accordance with Art. 23 paragraphs 2 and 4 of the SEC.
- 3. The supervisors guarantee that the topics they offer in accordance with Art. 23 paragraph 3 of SEC are suitable for dissertation. This is understood to mean that the topics have a potential for finding new scientific knowledge suitable for publication in scientific journals and academic conference proceedings.
- 4. Supervisors shall submit semestral evaluation of their doctoral students along with their ISP to the head of the BBB via the heads of their supervising departments. Supervisors unambiguously state in the evaluation whether they recommend that the doctoral students continue in their studies, or whether they suggest with justification that the study is ended.
- 5. ISP put together and approved in accordance with Art. 26 paragraphs 1 and 2 of the SEC and semestral evaluations are to be stored in the information system.
- 6. The head of the supervising department and the head of the BBB shall express their opinions on the evaluation. Each of them may themselves also suggest with justification that the study is ended.
- 7. In case the supervisor, the head of the supervising department, or the head of the BBP suggest that the study is ended, the BBP shall debate the doctoral student's course of study within one month. The BBP may suggest that the Dean ends the study on the grounds of neglect of responsibilities. The Dean may end the study based on the recommendation of the BBP.
- 8. A pre-arranged part of the doctoral students' professional training may be provided by a supervisor specialist in accordance with Art. 24 of the SEC.

Article 5

Branch Boards

- 1. The role, rights and responsibilities of the BBB and BBP are laid down by Art. 21 of SEC.
- 2. Requirements for the expertise of the BBB and BBP members in accordance with their mission as per Art. 21 of SEC may be determined by the Dean by means of a regulation after debating it in the FEE Academic Senate.
- 3. The BBB members are academic staff members of more departments.
- 4. BBB members elect a chairperson among themselves, as well as a vice-chair, who deputizes the chairperson during their absence or in case a conflict of interests arises.

Article 6

Study Block

- 1. The study block consists of:
 - a) Completion of no less than 4 and no more than 6 compulsory professional courses²,
 - b) Language preparation completed according to paragraph 5,
 - c) A written first draft of the dissertation and a discussion on it,
 - d) Professional activity supported with publications,
 - e) teaching practice³
- 2. The extent of responsibilities as per paragraph 1 sections a), d), e) and the degree of their fulfilment is determined in credits. Doctoral students must obtain no less than 30 credits during their study block, where the final number of credits obtained for completing professional courses includes only credits for compulsory professional courses. Doctoral students may take other optional courses (e. g. language courses), which do not have any credit value.
- 3. Studying professional courses, writing the first draft of the dissertation and the discussion on it are scheduled by the ISP for no more than 4 semesters in full-time study and no more than 6 semesters in distant and combined forms of study in accordance with SEC Art. 27 paragraph 11. After this period, no later than the end of the 25th month of full-time study or the end of the 37th month of distant or combined form of study respectively, doctoral students shall fulfil all their responsibilities of the study block, and thus
 - Will have completed all compulsory professional courses by successfully passing the respective exams,
 - Will have completed their language preparation as per paragraph 5,
 - Will have obtained the total of 30 credits, of which no less than 6 shall be obtained for publication activity,
 - Will have completed their first draft of the dissertation and successfully presented it during the discussion.

Failure to meet these requirements shall be considered a neglect of responsibilities and shall be the grounds for ending the study. Should doctoral students study one part of their study period in the full-time form and another part in the combined form, the Dean shall

² A compulsory professional course is a course listed in the IC. The rules for changes to IC are provided for by Art. 26 paragraph 5 of SEC.

³ Exceptions to this teaching practice are laid down by Art. 26 paragraph 5 of SEC.

- determine the deadline for ending the study period on deciding the change of the form of study. The proportion of time in full-time and combined study forms, as well as the next dates for discussing the first draft of the dissertation shall be taken into consideration.
- 4. During the first year of study, doctoral students must obtain at least 8 credits. Failure to meet this requirement shall be considered a neglect of requirements and shall be the grounds for ending their study.
- 5. Language preparation shall be completed by the English language exam, or shall be substantiated by a language qualification certificate acknowledged by the Department of Languages. As a general rule, the exam takes the form of a discussion on the first draft of the dissertation written in the English language.
- 6. If the first draft of the dissertation is not written in English, the language preparation exam may not take the form of a discussion on it.
- 7. The grade from the English language exam in the form of a discussion on the first draft of the dissertation is independent of the final agreement or disagreement with the conclusion of the paper.
- 8. Doctoral students include four to six one-semester compulsory professional courses in their ISP, no less than two of which are from accredited DSP branches and have the uniform value of four credits. The number of credits for courses outside the accredited DSP is approved by the head of the BBP, and each of the courses may have the maximum value of four credits, according to their extent.
- 9. The study block may also include a stay at a research workplace abroad. Doctoral students may obtain 1 credit for each completed 30 days of such a stay, but no more than 6 credits in total for the whole study block. The credits shall be granted by the Vice-Dean for Doctoral Study and Research based on submitting a professional report from the stay and references from the supervisor and the head of the BBB.

Article 7

Written Preparation for Dissertation

- 1. The contents of the written first draft of the dissertation and the form of the discussion thereof are laid down by Art. 27 paragraph 9 of SEC.
- 2. Doctoral students who have obtained no less than 30 credits shall register for the discussion.
- 3. Based on the discussion, a board comprising the head of the supervising department, the supervisor, a member of the BBB, and the opponents (assessors) appointed as per Art. 27 paragraph 10 of SEC, shall:
 - Agree with the conclusions of the preparation, and thus agree with continuing the study as well, or
 - Conditionally agree with the results of the preparation; doctoral students shall revise and resubmit the preparation for new discussion with a deadline suggested by the BBB and approved by the Dean; the new discussion shall take place no later than three months from the date of the unsuccessful discussion, or
 - Disagree with the conclusions of the preparation, having found flaws in its content to be so serious that the doctoral students are unlikely to successfully complete their study; in such a case, the board submits a proposal of study termination to the Dean; the Dean may terminate the study.

4. Other requirements for the preparation and discussion shall be laid down by the Dean by means of a regulation.

Article 8

Teaching Practice

- 1. Teaching practice, which is a part of full-time doctoral students' ISP in the extent laid down by Art. 26 paragraph 5 of the SEC, may cover the entire period of study. Teaching practice exceeding the extent as per Art. 26 paragraph 5 is only possible with verifiable consent of doctoral students. Courses in which doctoral students shall perform their teaching practice shall be specified in their ISP.
- 2. Teaching practice in full extent, i.e. 4 hours per week over the period of 4 semesters on average, may have the value of no more than 4 credits; teaching practice in smaller amounts shall have a proportional credit value. In legitimate cases approved by the head of the supervising department, doctoral students may also obtain teaching-practice credits based on creating new learning texts, multimedia teaching courses, and laboratory work. Creating is understood here as an independent creative activity during the preparation of educational texts and aids. Even in such a case, the total amount of teaching-practice credits shall not exceed four.
- 3. Supervisors shall indicate the type and extent of teaching practice performed in the assessment at the end of the semester, and they shall propose their credit value
- 4. Doctoral students shall apply for teaching practice recognition with the head of the BBB at the end of the first year and at the end the study block. They shall indicate the courses taught and their extent in the application form. The application shall be acknowledged by the head of the department responsible for the courses taught. The head of the BBB shall grant the students with credits in their semestral evaluation.

Article 9

Research and Scientific Publication Activity

- 1. Doctoral students shall participate in scientific and research activities according to the supervisor's instructions. The results of such activities shall be documented in the form of authorship or co-authorship of professional publications, which shall have the credit value set by the head of the BBB according to the supervisor's proposal in accordance with Paragraph 3.
- 2. The minimum number of credits obtained for professional publication activity is 6. Failure to meet this requirement shall be considered a neglect of responsibilities and shall be the grounds for ending the study.
- 3. The credit value of professional publication activity shall be laid down by the Dean by means of a regulation, which may only be issued with approval of the FEE Scientific Council. Doctoral students may choose to have their publication evaluated according to the regulation which was valid at the time of their enrolment, or the latest regulation, as they wish.

Article 10

State Doctoral Exam

1. The goals and procedure of the SDE are laid down by Art. 34 of the SEC.

- 2. If doctoral students study the full-time doctoral study program accredited with the standard duration of study of 4 years, they shall take the exam before the end of the 3rd year of study. Should they receive a failing grade, they shall take a make-up SDE no later than the end of the 4th year of study. Failure to meet this requirement shall be considered a neglect of responsibilities and shall be the grounds for ending the study.
- 3. Further requirements for performing the SDE shall be laid down by the Dean by means of a regulation.

Article 11

Dissertation Theses

- 1. Doctoral students shall submit their dissertations only if they have already published at least one scientific paper on a topic relevant to the dissertation topic in an impact factor journal as a main author, or if they have such a paper accepted for publication.⁴.
- 2. If doctoral students submit their dissertation in the form of a set of publications and accepted manuscripts provided with linking text, no less than three of such publications shall be scientific papers in impact factor journals. Doctoral students shall be listed as main authors of no less than two of the publications.
- 3. If doctoral students do not successfully defend the dissertation before the end of the standard study period, after the end of it, their study shall be suspended until their dissertation defence as per Art. 30, SEC, provided that the maximum study period as per Art. 8, SEC, is not exceeded, or if doctoral students do not change their form of study from full-time to combined. The requirements and requisites of dissertation defence shall be laid down by the Dean in the form of a regulation.

Article 12

Termination of Study

- 1. Except for the instances specified by the SEC, DS shall be terminated according to this regulation:
 - a) when repeatedly failing to report to discuss study matters as per Art. 2 paragraph 5,
 - b) in case of a negative semestral evaluation of ISP fulfilment as per Art. 4 paragraph 7,
 - c) in case of not reaching the given number and structure of credits during the period of study block and during the first year of study as per Art. 6 paragraphs 3 and 4,
 - d) in case of not reaching the given number of credits for publication activity as per Art. 9, paragraph 2,
 - e) not passing the SDE or make-up SDE scheduled as per Art. 10, paragraph 2.

All the instances above shall be considered neglect of responsibilities resulting from the study program according to Art. 34 paragraph 7, letter b), SEC.

Article 13

Provisions to Eliminate Severities

1. Should the application of this regulation lead to excessive severity, the Dean may make provision to eliminate it and provide for an exception. The Dean shall inform the FEE

⁴ If doctoral students are not listed as the first authors, then supervisors explicitly define the student's share in the paper in their review for thesis defence. For instance, in mathematical sciences, it is customary to list authors in alphabetical order.

Academic Senate about providing for such an exception.

2. The exception may not infringe the limit for maximum time of study, as laid down by Art. 3 paragraphs 7, 8, and Art. 19 paragraph 8, SEC.

Article 14

Transitional and Final Provisions

- 1. ISP of students approved before this regulation takes effect shall remain valid, including the credit value of courses.
- 2. For students enrolled between 1st March 2007 and 31st August 2012, it is sufficient to publish a paper in a reviewed professional journal in order to meet the requirements of Art. 11, paragraph 1 of this regulation, provided that the topic of the said paper is related to the dissertation topic and the student is the main author.
- 3. The unlimited-time approval of supervisors by the FEE Scientific Council shall be terminated as of 1st February 2016. The supervisors already appointed shall remain in the role of supervisors for the period of study of the respective doctoral students.

This regulation has been approved by the FEE Academic Senate on 4th December 2015.

Its provisions have taken effect with the CTU Academic Senate approval on 16th December 2015.

This Code takes effect as of 1st January 2016.

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Dean