# Doctoral Degree Regulations

as of April 21, 2023

On the basis of § 40, § 88 para. 1 No. 2 and § 13 para. 4 sentence 1 of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (SächsHSFG) of January 15, 2013 (SächsGVBl. p. 3),

last amended on June 1, 2022 (SächsGVBI. p. 381), the Faculty Board of the Faculty of Computer Science of Dresden University of Technology has issued the following Doctoral Degree Regulations as statutes.

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## §1 Scope of Application

These regulations govern the implementation of doctoral procedures at the Faculty of Computer Science.

## § 2 Academic Titles

(1) The Faculty of Computer Science may grant the following academic titles on behalf of Dresden University of Technology following a doctoral procedure:

Doktoringenieurin or Doktoringenieur (Dr.-Ing. – Doctor of Engineering), Doktorin or Doktor rerum naturalium (Dr. Rer. Nat. – Doctor of Natural Sciences) or, Doctor of Philosophy (Ph. D.).

(2) Following a resolution of the Faculty Board, Dresden University of Technology may also award the following academic degrees:

Doctor of Engineering honoris causa (Dr.-lng. h. c.) or, Doctor rerum naturalium honoris causa (Dr. rer. nat. h. c.).

## § 3 Doctoral Studies

- (1) Doctoral Studies serve both as proof of a candidate's particular proficiency to conduct independent academic work as well as proof of the candidate's academic education beyond general study objectives in the area of Computer Science.
- (2) This proof shall be provided, except in the case of an honorary doctorate in accordance with § 19, through the dissertation in accordance with §11 and the oral component of the doctoral degree in accordance with § 12.
- (3) The prerequisite to be awarded the doctoral degree of Dr.-Ing. is a confirmation from the Faculty that the dissertation substantially addresses engineering aspects of computer science. The prerequisite to be awarded with the doctoral degree of Dr. rer. nat. is a confirmation from the Faculty that the dissertation substantially addresses mathematical-structural scientific aspects of computer science. The prerequisite for the doctoral degree of Ph. D. is the completion of doctoral studies in computer science in accordance with the applicable study regulations.

## § 4 Doctoral Committees

- (1) The committee responsible for doctorates is the Faculty Board. For this purpose, it forms a Doctoral Committee as a permanent Faculty Committee. The Doctoral Committee consists of the Dean or a university lecturer nominated by the Dean as Chairperson, at least three additional university lecturers and a postdoctoral Research Associate belonging to the Faculty. The Faculty Board appoints a first Deputy and a second Deputy to the Chairperson of the Doctoral Committee from among the university lecturers appointed to the Doctoral Committee. The members of the Doctoral Committee are appointed by the Faculty Board for a term of three years. Members can be reappointed.
- (2) After the opening of a specific doctoral procedure, the Doctoral Committee appoints a Doctoral Commission for the tasks assigned to it according to these Regulations, and also appoints the Chairperson and Assessors. The Doctoral Committee consists of at least five members, including the assessors and the specialist supervisor. The Chairperson of the Doctoral Commission must be a university lecturer from the Faculty; § 11 para. 6 applies to the Assessors. Additional members of the Doctoral Commission are typically university lecturers from the Faculty. It is possible to appoint Extraordinary Professors as well as Honorary Professors, habilitated members of the Faculty, TUD Young Investigators, university lecturers working at others faculties or qualified academic researchers, should this be necessary for the topic. When conducting collaborative doctoral procedures with a university of applied sciences, one member of the Doctoral Commission must be a university lecturer from the respective university of applied sciences.
- (3) The meetings of the Doctoral Committee and the Doctoral Commission are not public. They may take place entirely on site, or entirely via video conference (virtual), or a mix of the two via an on-site meeting where some members participate via video conference (hybrid). The members of both committees are bound by confidentiality. In order for the Doctoral Committee and the Doctoral Commission to pass a resolution, at least four people, including the Chairperson, must be present The provisions of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony and the stipulations of the Rules of Procedure and the Procedural Principles of the University Committees of TU Dresden, as amended, shall apply to the majority of resolutions. Minutes must be kept of the deliberations and resolutions for doctoral matters.

# § 5 General Procedural Regulations and Appeal Proceedings

(1) Administration for the doctoral procedure may, insofar as this is permissible and possible, take place via the software-based Doctoral Management System supplied for this purpose by Dresden University of Technology. Communication between the Doctoral Committees, Faculty Organizational Units responsible for doctoral administration and the doctoral candidate is permitted to be exclusively electronic, provided that these Regulations do not stipulate otherwise, and that the respective candidate does not raise any objections to electronic communication with the person chairing the Doctoral Committee. For necessary data processing, the Regulations for the Processing of Personal Data in the Doctoral Phase at TU Dresden apply.

(2) § 37 Administrative Procedure Act stipulates to what extent the paper or electronic forms of declarations, decisions and administrative acts are required under these Regulations.

If at least one advanced electronic signature is required for documents, this will be expressly stated in this regulation. An advanced electronic signature is created using means which are exclusively under the control of the user and which unequivocally indicate the user as the signature holder and guarantees the integrity of the document. The advanced electronic signature of a group certificate is not sufficient for this purpose.

- (3) The decisions of the committees responsible for the doctoral procedure will be shared with the candidates either in writing or electronically. The Chairperson of the responsible committee shall announce decisions that adversely affect candidates by notification that is open to appeal, which shall be substantiated and contain legal instructions on how to appeal.
- (4) There is a formal procedure for appealing against decisions which are considered administrative acts during the doctoral examination procedure. The Faculty Board is the appeal authority. Decisions in the doctoral procedure which are also as considered administrative acts include:
- 1. Non-admission to doctoral studies and refusal as a doctoral candidate as well as revocation of admission,
- 2. Non-commencement of doctoral procedures,
- 3. Non-acceptance of the postdoctoral thesis,
- 4. The evaluation of additional academic work, the progress presentation and doctoral work,
- 5. Non-admission to repeating postdoctoral work,
- 6. Inconclusive termination (discontinuation) of the doctoral procedure and
- 7. Non-awarding of the academic title.
  - (5) Upon written request, candidates will be granted access to their doctoral records after the completion of the doctoral procedures.

## § 6 Admission to Doctoral Studies

- (1) Individuals shall be admitted to doctoral procedures if they:
- 1. Have completed a *Diplom*, Master's or *Magister* degree at an institution of higher education, or have completed the State Examination, which in general must have an overall grade of at least "good", with a final thesis with the grade of at least "good" in an area relevant to the doctoral program.
- 2. Fulfill the personal requirements for holding the academic degree.
- 3. Have not already failed a doctoral procedure twice or are not currently in a pending doctoral procedure.
- 4. Have submitted an application for acceptance as a doctoral candidate with all the required documents in accordance with § 7.

- (2) Furthermore, individuals shall be admitted to doctoral procedures if they have competed a Bachelor's degree at an institution of higher education with the overall grade of at least "very good" and have completed a final thesis with the grade of at least "very good." Paragraph 1 numbers 2 to 4 shall apply accordingly.
- (3) Universities and universities of applied sciences work together in collaborative doctoral procedures by supervising the doctoral work together.
  - (4) Individuals will not be admitted to doctoral studies if they:
- 1. Do not fulfill the prerequisites stipulated in paragraph 1 or paragraph 2.
- 2. Hire or have hired the services of intermediaries for the purposes of demonstrating doctorate opportunities in exchange for money.
- 3. Have paid for services in relation to the doctoral procedure or its preparation, and made use of free services which contradict the meaning and purpose of the examination procedure.
- 4. Perform or have performed paid services in relation to the doctoral procedure and its preparation which contradict the meaning and purpose of the examination procedure.
- (5) The Doctoral Committee makes a decision on the recognition of the equivalence of foreign examinations and degrees, taking Agreements of Equivalence into account. In case of doubt, the opinion of the Saxon State Ministry for Science, Culture and Tourism must be obtained. In cases where applicants have been authorized to hold an academic degree acquired abroad in the form of a German degree entitling them to a doctorate, this degree is to be recognized as equivalent.
  - (6) The admission decision is made on the basis of the decision on acceptance as a doctoral candidate in accordance with § 7.

# § 7 Acceptance as a Doctoral Candidate

- (1) Individuals who fulfill the admission requirements in accordance with § 6 and intend to complete their doctorate at the Faculty of Computer Science, must apply for acceptance as a doctoral candidate, either before or at the latest when starting their doctoral project. This application constitutes an expression of intention to complete a doctorate at the Faculty within the next six years.
- (2) The application must be completed electronically with the software-based Doctoral Management System used by Dresden University of Technology and must be submitted either in writing or electronically to the Chairperson of the Doctoral Committee. The following must be submitted together with the application:
- 1. Proof of admission requirements in accordance with § 6. The original documents or officially certified copies may be requested in case of doubt.
- 2. The provisional subject of the dissertation.
- 3. A curriculum vitae in tabular form presenting the candidate's academic career, including proof of completed additional studies or examinations. The original documents or officially certified copies may be requested in case of doubt.
- 4. A copy of the Supervision Agreement in accordance with paragraph 3.
- 5. A suggestion for a specialist supervisor.
- 6. A statement on any previous inconclusive doctoral procedures.

- 7. A written or advanced electronically signed declaration that these Doctoral Degree Regulations and the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" applicable at Dresden University of Technology are accepted.
- 8. A declaration that a certificate of good conduct (*Führungszeugnis*) according to § 30 para. 5 Federal Central Register Act (*Bundeszentralregistergesetz*) which is to be submitted to the Faculty has been applied for at the registration office.
- (3) Supervision of the doctoral candidate is conducted in accordance with § 4 para. 1 to 5 of the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" applicable at Dresden University of Technology. Thereafter, the supervision of doctoral candidates shall be structured as follows:
- 1. Supervision is carried out by a supervision team, consisting of the main supervisor and the specialist supervisor.

In addition, other individuals with specialist expertise can be involved in the supervision and the supervision team in an advisory capacity.

The supervisors (the main supervisor and the specialist supervisor) should typically be university lecturers. One of these individuals is permitted to be a person working in research with adequate postdoctoral qualifications, such as an Extraordinary Professor, Honorary Professor, *Privatdozent* (private lecturer) or TUD Young Investigator, or an experienced postdoctoral Research Associate.

- 2. The supervision teams meet with the doctoral candidate at least once a year to discuss the progress of their work and to make recommendations.
- 3. In order to create a transparent relationship between the supervision team and the doctoral candidate in terms of content and time, and to ensure that the doctoral project can be completed to a high standard within an appropriate period of time, a Supervision Agreement between the main supervisor, the specialist supervisor and the doctoral candidate must be concluded at the start of the doctoral project (see Annex 1). The Supervision Agreement must take at least the following aspects into account:
  - a) The parties involved (doctoral candidate, main supervisor, specialist supervisor, mentor and any other persons involved)
  - b) Information pertaining to the dissertation project and subject of the dissertation work (the title if already available)
  - c) A structured timeline and work plan or its further development
  - d) Provisions for regular discussions on the status and progress of the dissertation project
  - e) Accompanying qualifications to support academic independence at an early stage and career advancement
  - f) Provisions on the work conditions for the doctoral candidate (such as place of work, access to resources, integration into a research group, research alliance or graduate program)
  - g) The obligation for all parties involved to comply with the principles of good scientific practice
  - h) Provisions on conduct in cases of conflict
  - i) Particular measures or provisions on balancing work and family life
- 4. The completion of the doctorate within a reasonable period of time is encouraged by the supervisors.

- 5. Doctoral candidates are required to participate in a training course on good scientific practice. For this purpose, Dresden University of Technology offers courses comprising four 45-minute teaching units each semester.
- (4) The Doctoral Committee decides to accept or reject doctoral candidates on the basis of the documents named in paragraph 2. The acceptance confirms the main supervisor and determines the specialist advisor. Acceptance is rejected if the subject-specific admission requirements named in § 6 are not fulfilled. Acceptance is also rejected if the applicant does not meet the personal requirements for the holding of an academic title. The decision must also be made taking the certificate of good conduct (*Führungszeugnis*) into consideration. The decision to accept an applicant may be combined with the imposition of conditions, such as additional course work in accordance with § 8 or additional examinations to be taken as part of a doctoral studies. If accepted, the applicant is included in the list of doctoral candidates to be maintained by the faculty, a legal relationship is established between the faculty and the doctoral candidate, and the applicant receives the status of doctoral candidate.
- (5) Acceptance as a doctoral candidate can be revoked if the progress of the dissertation or the results available up to that point do not give reason to expect successful completion of the doctoral process. The main supervisor must submit a statement for this purpose. Before the acceptance is revoked, the doctoral candidate must be heard. The decision is made by the Doctoral Committee, but not before three years have elapsed. After being accepted as a doctoral candidate, the doctoral candidate may also submit a statement to the Dean of the Faculty or the Chairperson of the Doctoral Committee stating that they no longer wish to pursue their PhD studies. All of the cases mentioned above end the legal relationship with the faculty and result in the doctoral procedure being terminated without a grade. The doctoral candidate is then struck from the list of doctoral candidates.
  - (6) Acceptance as a doctoral candidate is an obligatory condition for the initiation of the doctoral procedure.
- (7) If a PhD degree is the objective of the doctoral procedure, the certificate confirming enrollment in the computer science doctoral degree program must be submitted to the Doctoral Committee no later than three months after being added to the list of doctoral candidates.
- (8) The specialist advisor provides support during the doctoral studies and advises the doctoral candidate on questions relating to their area of expertise and other matters relating to doctoral studies. Together with the main supervisor, the specialist advisor assesses the progress presentation in accordance with § 9 and must pose advanced specialized questions in the defense as a member of the Doctoral Commission in accordance with § 12 paragraph 3.

## § 8 Additional Study Requirements

(1) Additional study requirements may be specified as conditions for successful doctoral studies with the acceptance as a doctoral candidate in accordance with § 7. The objective of such conditions is to support the content of the doctoral project and to ensure a broad academic foundation, especially in subject areas that have not yet been covered, or only covered to a limited extent.

(2) If the candidate holds a *Diplom, Magister* or Master's degree from a university, or has passed the State Examination in a degree program relevant to the doctoral field with at least 50% computer science content, and the standard period of study comprised at least nine semesters, no additional study requirements will be imposed. If the standard period of study for the degrees named in sentence one comprised less than nine semesters, or if the degree in question is an engineering, science or mathematics Diplom, Magister or Master's degree from a university, or the State Examination had less than 50% computer science content, the range of the additional study requirements should generally be between 9 credit points (LP) and 18 credit points (LP).

In all other cases, the range of additional study requirements may be up to 27 LP.

For Master's degrees, the preceding Bachelor's degree and the Master's degree in question are considered together for the evaluation of the amount of computer science content necessary in accordance with sentences 1 and 2 and to calculate the standard period of study.

- (3) Additional study requirements are determined by the Doctoral Committee in consultation with the main supervisor. Additional study requirements may comprise an examination or multiple examination sections and must generally be completed in either German or English. Additional study requirements is examined by at least two examiners or by one examiner and one person who is a subject specialist. The Doctoral Committee appoints university lecturers from the Faculty as examiners and generally appoints postdoctoral Research Associates belonging to the Faculty as subject specialists.
- (4) The examiners and, if applicable, the subject specialist will determine the grading of the additional study requirements. The following grades will be used for this purpose:

= a performance especially deserving of recognition 1 = sehr gut (very good)

2 = gut (good)= a performance still worthy of recognition

3 = befriedigend (satisfactory) = a still acceptable performance 4 = ausreichend (pass) = a performance with major flaws 5 = nicht ausreichend (fail) = an insufficient performance

If only one examination is required, this must be completed with at least the grade of "good." If multiple examination sections are required, the average grade of the examination sections must be at least "good." The average grade of examination sections is calculated using the following schema:

An average of 1.5 and better = very good, An average of 1.6 to 2.5 = good,

An average of 2.6 to 3.5 = satisfactory,

An average of 3.6 to 4.0 = pass, An average of 4.1 or lower = fail.

The overall grade is not formally determined. The examiners inform the Chairperson of the Doctoral Committee of the grade of the individual examinations or examination sections. The Chairperson then informs the application of the result in writing or electronically. If multiple examination sections have been taken, the Chairperson of the Doctoral Committee shall also determine the average of the grades of the partial examinations in accordance with sentence 5.

(5) Additional study requirements must be completed at least two years following the acceptance as a doctoral candidate. Notwithstanding this period, a repeat examination may be taken once within six months of the announcement of the examination result if the required grade or grade point average was not achieved in the first attempt. If the required examination result is not achieved after the repeat examination, this will result in the doctoral procedure being terminated without a grade. The doctoral candidate is then struck from the list of doctoral candidates. The same applies if the additional study requirements are not completed or repeated within the stipulated periods, unless there are grounds for missing the deadline outside of the control of the doctoral candidate. Upon submission of a justified request, the deadline for completion of additional study requirements may be extended by up to one year by the Doctoral Committee.

#### § 9

## Progress Presentation

- (1) Before initiating the doctoral procedure, the doctoral candidate must hold an academic presentation in German or English on the current status of their research in their respective field of work (progress presentation), followed by a discussion on the subject matter. The objective is to provide a well-founded review of the subject area targeted in the dissertation, to derive the main open questions from this and to present one's own contributions to the solution made up to that point. The discussion can also go beyond the core topic of the dissertation and address related topics.
- (2) The progress presentation generally takes place one year before the defense of the dissertation is planned. It lasts no longer than 45 minutes, and the total duration of the progress presentation and discussion should not exceed two hours. The progress presentation and following discussion are open to anyone at the Faculty and must be announced one week before they are due to take place in an appropriate manner. The main supervisor and specialist supervisor must attend the progress presentation either on site or via video conference, in accordance with § 7 paragraph 2 number 3 and paragraph 3 sentence 3.
- (3) Following the progress presentation and discussion, the main supervisor and specialist supervisor grade the applicant's overall performance with either a "pass" or "fail" and inform the Chairperson of the Doctoral Committee of the result, who in turn announces the result to the applicant either in writing or electronically. If the progress presentation is failed, it can be repeated once more after three months have elapsed. Failure to pass the progress presentation again will result in the inconclusive termination of the doctoral procedure. The doctoral candidate is then struck from the list of doctoral candidates.

# § 10 Initiating the Doctoral Procedure

- (1) The doctoral procedure is initiated upon formal application by the doctoral candidate. The application to initiate the doctoral procedure must be created with the software-based Doctoral Management System used by Dresden University of Technology and must be submitted either in writing or electronically to the Chairperson of the Doctoral Committee. The following documents must be included:
- 1. A curriculum vitae in tabular form presenting the candidate's academic career.
- 2. A copy of the confirmation of acceptance as a doctoral candidate in accordance with § 7 and proof of compliance with any conditions imposed. The original documents or officially certified copies may be requested in case of doubt.
- 3. A printed and bound copy of the dissertation, generally in German or English, and in electronic form, as well as the electronic version of an abstract comprising one to three pages either in German or in English.
- 4. A list of the doctoral candidate's academic publications, which should usually show at least two international publications with the doctoral candidate's relevant participation at symposia or in peer-reviewed scientific journals.
  - 5. A declaration signed by the doctoral candidate either in writing or at least with advanced electronic signature pursuant to the template attached in Annex 2.

- 6. Proof of participation in a training course on good scientific practice, amounting to at least four teaching units.
  - 7. A declaration that a certificate of good conduct (*Führungszeugnis*) according to § 30 para. 5 BZRG, which is to be submitted to the Faculty, has been applied for at the registration office.
- 8. If the candidate is pursuing a PhD degree, proof that the work required for the doctoral program in Computer Science has been successfully completed. The original documents or officially certified copies may be requested in case of doubt. Suggestions for the assessors can also be attached with the application, although there is no entitlement for these to be considered.

Documents that were required for acceptance as a doctoral candidate and do not require any changes can be accepted as valid.

- (2) Withdrawal of the application to initiate the doctoral procedure is permitted, as long as the procedure has not yet been initiated. In this case, the application shall be deemed as not submitted. If the doctoral candidate indicates that they no longer wish to continue with the doctoral procedure after its initiation, this will result in the termination of the doctoral procedure and it will be considered an inconclusive doctoral procedure.
- (3) The Doctoral Committee makes the decision on initiating the doctoral procedure. The main supervisor may be asked for a supplementary statement on this matter beforehand. Initiation must be rejected if the conditions imposed when the doctoral candidacy was accepted or the progress presentation in accordance with § 9 were not completed successfully. The initiation of the doctoral procedure must also be rejected if the doctoral candidate does not meet the personal requirements for the holding of an academic title. The decision must also be made taking the certificate of good conduct (*Führungszeugnis*) in accordance with paragraph 1 number 7 into consideration. The initiation of the doctoral procedure must also be rejected if there are grounds that would lead to the withdrawal of the academic degree. If the doctoral procedure is not initiated for reasons stipulated in sentences 3 to 5, § 16 shall apply. Upon initiating the doctoral procedure, the Doctoral Committee shall appoint the assessors in accordance with § 10 paragraph 6 as well as the Doctoral Commission. The declaration on initiating the doctoral procedure simultaneously provides information on the composition of the Doctoral Commission and the assessors.
- (4) The Chairperson of the Doctoral Committee transfers the doctoral procedure after its initiation to the Doctoral Commission, who implement it fully.

# § 11 Dissertation

- (1) The dissertation serves as proof of the capability to produce independent academic work. It should make a substantial contribution to research in the area of Computer Science and must contain scientific findings.
- (2) The dissertation is typically the individually completed work of the doctoral candidate. It can also emerge from joint research. An academic paper with multiple authors may be accepted as a dissertation in exceptional cases insofar as the individual portion of the doctoral candidates can be clearly marked as such, can be read as an individual work, and can be evaluated on its own. To be considered the author, § 8 of the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" applicable at Dresden University of Technology shall apply.

- (3) Notwithstanding Paragraph 2, the doctoral candidate may, in individual cases and with the approval of their main supervisor as well as their specialist supervisor, also select the format of publication-oriented dissertation. This type of written dissertation comprises at least three publications where the doctoral candidate is the sole author or at least an author with a particularly significant contribution to works which have been published in the last five years in renowned international scientific journals or at relevant international symposia with a selective acceptance rate as part of a peer review procedure, or which have at least already been accepted for publication as well as an extended summary pursuant to Paragraph 3 Number 3. Each publication must contain the complete details of the scientific methodology employed, including experiments, empirical studies and proof. Each publication must be incorporated in full with successive page numbering and clearly referenced with respect to its publication medium, including reference to authors, publisher, date and city of publication, issue number and original page numbers. The doctoral candidate is responsible for obtaining the approval of the publisher for the required secondary publication at the Saxon State and University Library (SLUB).
- 1. For each incorporated publication with multiple authors, the doctoral candidate must expound in a separate declaration which parts they have contributed themselves within the meaning of scientific copyright. The co-authors must also produce a concordant declaration.
- 2. The selection of publications shall be reviewed by the Doctoral Committee prior to the initiation of the doctoral procedure.
- 3. The incorporated publications must be represented in a unified, conceptual overall context. Additionally, a comprehensive introductory part must precede them which introduces the overall research topic, discusses the motivation and sets the topic apart from the current state of research. Furthermore, a closing summary must augment the rest, in which the research findings from the publications are recognized and evaluated with a view to their potential impact on future research. In addition, each chapter based on publications must be embedded in the unified overall context via a suitable introduction and conclusion. These portions of the text must in addition to the embedded publications, the list of references and any appendices comprise at least 30 A4 pages. The comprehensive embedding of the publications in an overall scientific context must highlight the Faculty's standards of quality, in particular also the recommendations of the German Science and Humanities Council entitled "Quality Assurance Requirements for a Doctorate" ("Anforderungen an die Qualitätssicherung der Promotion").
- 4. Pursuant to Paragraph 6, second supervisors may not be co-authors of any of the embedded publications.
- 5. Upon application to initiate the doctoral procedure, doctoral candidates must clearly indicate their choice of the format of a publication-oriented doctorate in order to inform the Doctoral Committee and the Doctoral Commission accordingly.
- 6. The Doctoral Committee shall check for compliance with the above-mentioned criteria upon initiation of the doctoral procedure.
- (4) In general, the dissertation shall be written in German or in English. The Doctoral Committee shall decide on any exceptions to this rule insofar as the doctoral candidate has properly submitted a request prior to the initiation of the doctoral procedure. The source material used in the preparation as well as any other aids must be specified in full. Works that have previously served as examined or graduation assignments may not be submitted as dissertations.

- (5) Along with their dissertation, doctoral candidates must also submit a pledge that they have complied with the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations," they wrote the work themselves, they did not use any sources or resources other than the ones cited, and that they performed cross-phase quality assurance for all relevant data arising from the dissertation work. Likewise, they must also declare that they have complied with data protection stipulations and that personal data of third parties will only be published without their consent insofar as it is essential for presenting research findings about events in contemporary history and no predominant interests of the affected person(s) worthy of protection obstruct this.
- (6) The dissertation shall be evaluated by at least two assessors who are qualified to review scientific topics. The dissertation must be assessed by at least one external, full-time assessor from outside Dresden University of Technology who was not involved in supervising the content of the dissertation and who does not work in the same institute as the main supervisor. One assessor (primary assessor) must be an appointed professor at the Faculty of Computer Science at Dresden University of Technology in accordance with § 60 or § 62 SächsHSFG. Other assessors (secondary assessors as well as external assessors) may be university or junior professors, TUD Young Investigators, extraordinary professors, or honorary professors with member rights, or persons who can provide evidence of work that is adequate of at least a postdoctoral candidate. The following persons may not be appointed as secondary assessors:
- 1. Chairs of the Doctoral Commission
- 2. Persons who have entered into a collaboration with the doctoral candidate or the main supervisor within the last three years since submission of the dissertation
- 3. Persons who work at the same institute as the main supervisor
- 4. Persons who raise concerns of bias under the corresponding application of § 21 and § 22 of the Administrative Procedure Act, the Rules of Procedure and Procedural Principles of the University Committees of TU Dresden, or the German Research Foundation's "Guidelines for Safeguarding Good Research Practice."

In justified cases, a third review can be obtained from a university lecturer or assessor who can provide evidence of work that is adequate of at least a postdoctoral candidate. The same regulations apply for obtaining this third review as do for the appointment of the secondary assessor. The reviews can also be submitted in electronic form with at least an advanced electronic signature.

(7) The assessors recommend to the Doctoral Commission in personal and independent reviews whether the work should be accepted or rejected as a dissertation. If an assessor deems the dissertation to be an outstanding, extraordinary work, they may also nominate it for an award. Such a nomination shall only be made if, in addition to an excellent placement in the publication spectrum, other particular achievements are represented, such as particularly high-ranking publications, successful transfer of findings to practice, proven widespread use of the findings in the research community, patenting of important results, prizes such as best paper awards, or other forms of special recognition. The nomination for an award must be justified in the review with express reference to the special achievements. The primary assessor's review should also contain statements regarding compliance with the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" and, for experimental or empirical portions of the dissertation, statements about the acquisition and quality of the data.

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- (8) The reviews should be submitted within a month if possible, but within three months at the latest, to the Chair of the Doctoral Commission. If there is an undue delay in issuing the review despite repeated reminders, the Doctoral Committee may countermand the defaulting assessor and appoint a new one.
- (9) The submitted dissertation may be screened, in particular using plagiarism detection software, for potential text passages that have been borrowed but not cited or for other non-cited sources. This screening may be conducted at random or if there is reason to suspect plagiarism.
- 1. As part of the random screening, at least one in five dissertations submitted at the Faculty should be screened with the aid of plagiarism detection software between the time of submission and the completion of the doctoral procedure.

The dissertations to be screened are kept anonymous and chosen at random. If a joint Doctoral Examinations Body exists, the screening shall be conducted by the joint Doctoral Examinations Body at the School level using plagiarism detection software. The Office for Good Scientific Practice may also be involved. If there is no joint Doctoral Examinations Body at the School level, the Doctoral Examinations Office at the Faculty level will be charged with completing the screening using plagiarism detection software. The Doctoral Examinations Body or the Doctoral Examinations Office shall inform the Doctoral Commission of the results of the screening. In the case of suspected plagiarism, the Chair of the Doctoral Commission shall charge at least one appointed assessor with the evaluation or scientific appraisal of the results of the plagiarism detection software screening. In accordance with Paragraph 5, this assessor may call on the help of other assessors to review these results if deemed necessary. The Doctoral Commission must be informed of the result of the screening. If there are signs of violations against good scientific practice, the Chair of the Doctoral Commission will inform the Chair of the Doctoral Committee of the Faculty. If justified suspicion of a violation against good scientific practice arises within the scope of the screening for plagiarism, the Office for Good Scientific Practice must also be involved.

- 2. If people involved in the doctoral procedure such as assessors harbor doubts that the dissertation was written in keeping with academic integrity, the dissertation must be screened using plagiarism detection software. The results of screening with plagiarism detection software in cases where plagiarism is suspected must be evaluated or scientifically appraised by at least one assessor. In accordance with Paragraph 5, they may call on the help of other assessors to review these results if deemed necessary. The Doctoral Commission must be informed of the result of the screening. If there are signs of violations of good scientific practice, the Chair of the Doctoral Commission will inform the Chair of the Doctoral Committee of the Faculty. If justified suspicion of a violation against good scientific practice arises within the scope of the screening for plagiarism, the Office for Good Scientific Practice must also be involved.
- 3. Doctoral candidates whose dissertations are submitted to a screening in accordance with Number 1 and Number 2 must be informed thereof.
- 4. The provisions of data protection law must be observed. In cases where plagiarism detection software is used, personal data (e.g. cover page) is not provided for the technical screening unless the data is required for reviewing compliance with the stipulations of academic integrity.
- 5. In cases of suspicion of scientific misconduct, the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" shall apply for the following proceedings.

- (10) If an assessor merely recommends editorial changes, these can be formulated by the Doctoral Commission as editorial requirements of the doctoral candidate. Fulfillment thereof must be reviewed by the Doctoral Commission in cooperation with the relevant assessor prior to publication and printing of the dissertation. The outcome of this review shall be shared with the Doctoral Committee. If it is recommended that the dissertation be returned to the doctoral candidate for reworking, the Doctoral Commission will make the final decision on the matter. In this case, the defense will only be possible once the edited dissertation is resubmitted. If the Doctoral Commission cannot reach a unanimous decision, another member of university teaching staff must be appointed as an assessor at the recommendation of the Doctoral Committee. The Doctoral Commission can may set an appropriate deadline of up to six months for resubmitting the edited dissertation. Resubmission of a returned dissertation is only possible once. New reviews or additions to the existing reviews must be requested for a resubmitted dissertation.
- (11) Once all reviews have been submitted, the dissertation and the reviews will be made available electronically to anyone at the Faculty for a period of two weeks. If necessary, a paper form of the dissertation can also be created. The members of the Doctoral Committee and the Doctoral Commission as well as the other lecturers and postdocs at the Faculty have the right to view the dissertation and reviews, including the recommendations of the assessors, to make a statement for or against the acceptance of the dissertation within the display period, and to submit their statement within another fourteen days in written or at least advanced electronically signed form with a justification to the Dean. The doctoral candidate has the right to view the reviews and dissertation displayed at the Faculty in electronic form.
- (12) Once the display period has lapsed and, unless a statement for or against the acceptance of the dissertation has been properly submitted, after the statement deadline pursuant to Paragraph 11, the Doctoral Commission shall make a decision about the acceptance or rejection of the dissertation based on the reviews and the submitted statements. If the dissertation is rejected, the doctoral procedure will be terminated; § 13 Paragraph 1 applies. The electronic copy of the rejected dissertation will remain in the doctoral record together with the reviews. The printed copy will be returned to the doctoral candidate.

## § 12 Defense

- (1) If the dissertation is accepted, the doctoral candidate must present the findings in a public lecture and defend these findings in a subsequent academic discussion by responding to questions from the audience (defense). The lecture should last 45 minutes and the defense as a whole should not exceed two hours. The defense may take place entirely on site, entirely via video conference (virtually), or a mix of the two (hybrid) in which the defense takes place on site, but some attendees participate via video conference.
- (2) The date and time of the defense of the dissertation shall be set by the Chair of the Doctoral Commission, who shall send the doctoral candidate a written invitation. The invitation must be sent two weeks in advance. Furthermore, the Chair of the Doctoral Commission shall invite the members of the Doctoral Commission and make the date, time and location or video conference link of the defense publicly available.
- (3) The defense shall be led by the Chair of the Doctoral Commission. It shall typically be held in German or English. In exceptional cases, it may be held in another language upon the decision of the Doctoral Committee if the doctoral candidate, in agreement with the Doctoral Commission, has submitted a formal request to the Chair of the Doctoral Committee in due time. All attendees may pose questions during the academic discussion. The Chair of the Doctoral Commission may reject questions that are unrelated to the technical focus in the area of computer science or the academic subject of the dissertation.

- (4) Immediately after the defense, the Doctoral Commission shall decide whether the doctoral candidate has passed the defense and, furthermore, if their performance was outstanding. If the doctoral candidate has not passed the defense, § 13 Paragraph 2 shall apply.
- (5) If the dissertation has been accepted and the doctoral candidate has passed the defense, they shall have passed the overall doctoral procedure. If at least one assessor suggests that honors be awarded, then the performance of the doctoral candidate is deemed outstanding and the doctoral candidate has proven exceptional scholarly achievements, and the Doctoral Commission may, upon reaching a simple majority in a secret vote, suggest to the Doctoral Committee that the dissertation as a whole receive special honors.
- (6) General minutes of the defense shall be taken. The person taking minutes shall be appointed by the Chair of the Doctoral Commission; the minutes shall be signed by the person taking minutes and the Chair of the Doctoral Commission and subsequently included in the doctoral record.

# § 13 Repeating Failed Doctoral Work

(1) After completion of the doctoral procedure in accordance with § 11 Paragraph 12 as a result of the rejection of the dissertation, the doctoral candidate may take another doctoral examination. The candidate must wait half a year to submit a new application to initiate the doctoral procedure pursuant to § 10.

Another dissertation or a fundamentally revised version of the first dissertation on the same topic must be submitted along with the application. If the doctoral procedure is initiated, the same Doctoral Commission as was involved in the first attempt shall be reappointed. If the doctoral candidate also fails the second attempt, further attempts to obtain a doctorate shall not be permissible at the same Faculty.

(2) If the doctoral candidate does not pass their defense, the defense can be repeated in the same doctoral procedure within one year upon formal request. The application may be submitted after three months' time at the earliest. If the repeated attempt is not passed or conducted on time, the doctoral procedure will be concluded.

## § 14 Publication of the Dissertation

- (1) The dissertation must be published within one year and made accessible in a reasonable manner to the academic public via reproduction and gratuitous transfer to the SLUB.
- (2) In fulfillment of the obligation outlined in Paragraph 1, a complete electronic version of the dissertation must be transferred to the SLUB in a (preferably accessible) format stipulated by the SLUB. This version of the dissertation shall be published in an open-access format by the SLUB. Furthermore, the dissertation may be published and sold by commercial publishers if at least one hundred fifty copies are issued and the title of the dissertation as well as the place and date of doctorate completion are at least included on the back of the title page. In this case, five printed copies must be handed over to the SLUB, which shall then be made available for viewing and borrowing immediately.

- (3) Should the applicant culpably miss the deadline, all rights acquired through achievements in the doctoral procedure will be voided and the doctoral procedure will be terminated without the conferment of an academic degree. The Chair of the Doctoral Committee shall inform the applicant thereof in writing or electronically. Upon formal request and only in specially justifiable cases, the Dean of the Faculty or the Doctoral Committee may approve a transgression of the submission deadline and set an extension.
- (4) The provision of an embargo, in which the dissertation may not be published due to agreements the doctoral candidate has made with third parties, must be formally requested in writing from the Doctoral Committee using the template in Annex 3 along with the application to initiate the doctoral procedure pursuant to § 10 Paragraph 1. The request shall include a justification for the embargo. The request must be signed by the doctoral candidate and their main supervisor. An embargo of up to one year may be requested. Before expiry of the deadline, an extension of the embargo by a maximum of one additional year may be requested in the same way in justified exceptional cases. The Doctoral Committee's decision shall be shared with the applicant in writing. If the Doctoral Committee grants its approval using the template in Annex 4, this approval shall be submitted to the SLUB along with the obligatory copies of their dissertation. The obligation to provide copies of the work is thus fulfilled.

## § 15 Conclusion of the Doctoral Procedure

(1) If the doctoral candidate passes the doctoral procedure, the Chair of the Doctoral Commission shall make a formal recommendation to the Doctoral Committee for the conferment of an academic degree in accordance with § 2 Paragraph 1.

The Doctoral Committee shall arrange for the doctoral certificate to be issued and the list of doctoral candidates to be updated.

- (2) The doctoral certificate contains the first and last names, academic degree, date and place of birth of the doctoral candidate, the title of the dissertation, the academic degree to be awarded and any honors. It is issued with the date of the defense and bears the signature of the Rector and the Dean of the Faculty as well as the seal of Dresden University of Technology.
- (3) The Dean of the Faculty shall present the certificate to the doctoral candidate in a form that suits the occasion once the publishing obligation according to § 14 Paragraph 2 has been met and confirmed by the SLUB and the Doctoral Committee. The doctoral procedure shall thus be concluded. The Faculty as a whole shall be informed of the conclusion of the procedure.
- (4) Upon the conclusion of the doctoral procedure, the doctoral candidate may bear the title awarded to them with their degree certificate.
- (5) After the conclusion of the doctoral procedure, doctorates may be awarded honors by the Faculty and other dissertation prizes may be given. The decision shall be made by the commission entrusted with this task by the Faculty Board in a closed session. In making this decision, additional factors besides the dissertation and the reviews must be taken into account, in particular the ranking of the publication, the additional academic achievements and, if necessary, a brief presentation to be given by the candidate.

# § 16 Discontinuation of the Doctoral Procedure

- (1) The doctoral procedure may be discontinued at any time without a grade being issued a result if facts come to light that exclude the conferment of an academic degree. This applies in particular to fraudulent forms of proof that the admission requirements have been met, doctoral work completed, or other circumstances affecting the personal prerequisites of the candidate which would lead to a doctorate degree. If the doctoral procedure is terminated without a grade being issued, all legal entitlements and claims that the candidate had in the doctoral procedure up to that point expire. The doctoral candidate is then struck from the list of doctoral candidates. The decision regarding termination is made by the Doctoral Committee at its own discretion.
- (2) Before the doctoral procedure is terminated without a grade being issued, the Doctoral Committee must hold a hearing with the doctoral candidate. In the event of suspected scientific misconduct, the regulations stipulated in the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" at Dresden University of Technology apply to the procedure.

# § 17 Revocation of the Academic Title

- (1) The academic title shall be revoked if the candidate was not truthful when providing proof of the admission requirements or when carrying out the required doctoral work, or if facts come to light that would prevent the awarding of such a title. The Doctoral Committee makes this decision.
- (2) If, after the awarding of the academic title, it comes to light that the requirements for admission to the doctoral studies were not fulfilled without the candidate intending to deceive, this mistake can be remedied by passing the doctoral work.
- (3) In the event of suspected scientific misconduct, the regulations stipulated in the "Statutes for Ensuring Good Scientific Practice, Avoiding Scientific Misconduct and Handling Violations" at Dresden University of Technology apply to the procedure.

# § 18 Structured Doctoral Programs and Joint Binational Doctoral Procedures

The doctoral studies can also be completed as part of a structured doctoral program or a joint binational doctoral procedure insofar as the Faculty of Computer Science or individual university lecturers from the Faculty are involved. Additional arrangements may be made to accommodate this. It must be ensured that the doctoral candidates acquire the qualifications required by these Doctoral Degree Regulations and can provide proof thereof. In case of doubt, the Doctoral Committee shall decide whether this equivalence exists.

## § 19 Honorary Doctorate

- (1) An honorary academic degree can be awarded pursuant to § 2 Paragraph 2 to persons who have acquired special merits in science, technology, culture and arts in the area of computer science and have a special connection to the Faculty. The person to be honored may not be primarily employed at Dresden University of Technology.
- (2) A formal request for the awarding of an honorary academic degree in accordance with § 2 Paragraph 2 must be submitted to the Faculty Board by at least two holders of Chairs at the Faculty with sufficient reasoning. A Doctoral Commission to be employed by the Faculty Board whose members include at least five university lecturers, and to which the person submitting the request does not belong, shall review the merits of the person to be honored, bring in at least two other assessors, at least one of whom must come from outside Dresden University of Technology, and prepare a decision proposal for the Faculty Board.
- (3) The Faculty Board shall decide on the request in a secret vote. All university lecturers at the Faculty of Computer Science must be invited to the relevant Faculty Board meeting in due time. All Faculty Board members as well as other university lecturers who are present at the meeting are eligible to vote.

A three-fourths majority of the Faculty Board and a two-thirds majority of all persons who are eligible to vote are required to accept the request.

- (4) The decision of the Faculty Board about the awarding of an academic degree must be approved by the Senate pursuant to § 2 Paragraph 2.
- (5) The awarding of an academic degree pursuant to § 2 Paragraph 2 must be carried out in the form of a certificate signed by the Rector and the Dean which suits the occasion. The reasons and merits must be briefly summarized on the certificate. The Rector shall award the honorary academic degree. This right may be transferred to the Dean of the Faculty.
- (6) The Saxon State Ministry for Science, Culture and Tourism must be informed of the awarding of an academic degree pursuant to § 2 Paragraph 2.

## § 20 Doctoral Anniversary

The Faculty may honor the 50<sup>th</sup> anniversary of the awarding of an academic degree if this appears appropriate in view of special academic merits or a particularly close link between the person to be honored and the Faculty or Dresden University of Technology as a whole. The Faculty is free to select the occasion and form of honor. The Faculty Board shall make this decision.

# § 21 Entry into Force, Lapse, and Transitional Provisions

- (1) These regulations come into force on the day after publication in the official announcements of Dresden University of Technology. The entry into force of these regulations simultaneously mean that the Doctoral Regulations of the Faculty of Computer Science dated February 23, 2011 (Official Announcements of TU Dresden No. 2/2011 of April 27, 2011, p. 17), last amended by the statutes of October 27, 2014 (Official Announcements of TU Dresden No. 7/2014 of November 19, 2014, p. 51), hereby lapse.
- (2) These regulations apply to all doctoral procedures added to the list of doctoral candidates which are set to begin after these regulations enter into force. Decisions on acceptance as a doctoral candidate that were already made before these regulations came into force shall remain valid; these regulations shall apply beyond that. Doctoral procedures already underway at the time of entry into force of these regulations shall be completed on the basis of the provisions stipulated by the Faculty of Computer Science on in the doctoral regulations dated February 23, 2011 (Official Announcements of TU Dresden No. 2/2011 of April 27, 2011, p. 17), last amended by the statutes of October 27, 2014 (Official Announcements of TU Dresden No. 7/2014 of November 19, 2014, p. 51).
- (3) For doctoral procedures already underway at the time of entry into force of these regulations in which a decision about the acceptance of the doctoral candidate was already decided, the Doctoral Committee may decide within six months after these regulations enter into force to initiate the doctoral procedure pursuant to § 10 Paragraph 3 and to complete it on the basis of the provisions stipulated by the Faculty of Computer Science on in the doctoral regulations dated February 23, 2011 (Official Announcements of TU Dresden No. 2/2011 of April 27, 2011, p. 17), last amended by the statutes of October 27, 2014 (Official Announcements of TU Dresden No. 7/2014

of November 19, 2014, p. 51).

Issued based on the resolution of the Faculty Board of the Faculty of Computer Science as of January 18, 2023, and the approval of the University Executive Board as of March 14, 2023.

Dresden, April 21, 2023

The Rector of Dresden University of Technology

Prof. Dr. Ursula M. Staudinger

#### Annex 1:

## **Note on the Supervision Agreement**

A template for an agreement for supervising doctoral candidates – Supervision Agreement –
is provided as amended by the Graduate Academy in the form of a fillable document. The
Supervision Agreement template can be found and filled out at:

## https://tu-

 $\frac{dresden.de/ga/ressourcen/dateien/mitgliedschaft/mitgliedschaftsdokumente/Betreuungs}{vereinbarung.pdf?lang=de}$ 

• In the case of doctoral studies completed in cooperation with companies (industry cooperation), the use of the related annex to the Supervision Agreement is also recommended. The agreement supplements the Supervision Agreement and contributes to mutual certainty of action. A related template can also be accessed from the Graduate Academy website:

### https://tu-

dresden.de/ga/ressourcen/dateien/mitgliedschaft/mitgliedschaftsdokumente/BV Anlage Industriepromotion Formular.pdf?lang=de

## Annex 2:

## **Declarations on Initiating the Doctoral Procedure**

I hereby confirm that I have completed the submitted work without any inadmissible help from third parties or the use of any tools beyond the ones specified; any ideas taken directly or indirectly from outside sources are indicated as such.

In selecting and evaluating the material and producing the manuscript, I received support from the following persons: ...

No other persons were involved in the intellectual production of this work. Specifically, I have not made use of any help from commercial doctoral advisors. No third parties have received direct or indirect monetary payments for work having to do with the content of the submitted dissertation. The work has not been submitted to any examination body in this country or any other in the same or a similar form, nor has it been published.

Place, date

Signature of the doctoral candidate

# To Faculty of Computer Science Doctoral Committee Contact information of the applicant\* Last name First name Date of birth City and country of birth

\* I will inform the Faculty if my contact information changes prior to the publication of the dissertation.

## Dissertation

Telephone number

Home address – Street and house number

Annex 3:

Dissertation title			

Home address - Postal code and city

Email address

## I hereby request

The first embargo of the publication of my dissertation for one year starting
Submission of the required copies to the SLUB by
The final extension of the embargo of one year until _

Justification for the application:	
«Person.Surname»«Person.First name»	
hereby declare my consent to the dissert	tation being automatically published upon the
apse of the deadline.1	tation semigration acted by pasisined apon the
apse of the deadline.	
City, Date	Signature of the applicant
	Application
The above application has been approved b	by the main supervisor.
The above application has been approved.	sy the main supervisor.
Printed surname, first name of the mains	Signature and stamp of the main
supervisor of the dissertation	supervisor

<sup>&</sup>lt;sup>1</sup> The confirmation of publication of the dissertation on TU Dresden's publication server must be submitted to the SLUB upon the lapse of the embargo along with the submission of the printed copies of the dissertation.

# Annex 4: Approval of the Request for a Dissertation Embargo Note

The Doctoral Committee of the Faculty of Computer by Ms. /Mr. on <i>Month #xx, xxxx#</i> .	r Science approves the application submitted
The publication embargo* is approved until <i>Month</i> :	#xx, xxxx#. Once the embargo
lapses, the dissertation will be released for publicat	ion.
Date	Signature and stamp of the Chair of the Doctoral Committee

<sup>\*</sup> Must be submitted along with the submission of the written copies and the electronic version of the dissertation to the SLUB.