

Supplementary Information to the Doctoral Regulations of the Faculty of Computer Science and Electrical Engineering (IEF) at the University of Rostock

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1 General Information on the Doctoral Process

- Upon submission of the dissertation, the cover page, table of contents, publication list (including DOIs), and abstract have to be submitted as a PDF document to the Dean's Office of the IEF.
- Requests to the Faculty Council related to doctoral processes will be sent to all council members along with the data of the PhD candidate.
- When appointing expert reviewers, care must be taken to ensure that at least one of the reviewers is not also a co-author of the publications forming the basis of the dissertation.
- In the course of the possible inspection of the reviews in accordance with § 12 para. 5 of the Doctoral Regulations, the candidate will be informed of the grades of the individual reviews, unless the candidate does not wish this.
- During the PhD defense, all questions to the candidate should be noted down by a member of the doctoral committee.
- In a PhD defense where the Latin honor *summa cum laude* is possible to be awarded, at least one member of the Academic Affairs Commission or another member of the Faculty Council or an appointed representative must participate. Therefore, upon acceptance of the dissertation and after checking the expert reviewers' reports, the doctoral coordinator should inform the Faculty Council about the possible awarding of a *summa cum laude*.
- Based on the "Possible Justifications to award an Excellent (Summa cum laude)" the doctoral committee must clearly and comprehensively justify the awarding of the designation *summa cum laude* after the defense.

1.1 Possible Justifications to award an Excellent (Summa cum laude)

- All expert reviewers should rate the thesis as being excellent, and must provide diverse arguments for the exceptional scientific quality in their written report. If meaningful, supporting citations should be provided.

- The PhD student has an exceptionally broad and deep knowledge of the problem area, documented by an utterly convincing performance during the defense. This should be explained in detail.
- The student's publications are in leading journals or conferences of the field. It should be explained why those are leading journals or conferences.
- The thesis presents an exceptionally comprehensive approach toward solving a problem. Detailed arguments should be provided.
- The PhD work provides a revolutionary breakthrough in technology, e.g., documented by patents etc. This should be explained in detail.
- The work required interdisciplinary research and thus special skills in diverse areas. The specific challenges met by the research done should be explained in detail.

PLEASE NOTE: If the doctoral committee finds that criteria apply, the committee has to explain and justify this in detail (in a short written report).

2 Information on Types of Dissertations

Excerpt from the Doctoral Regulations of the IEF, Section 6 (3)

“The results of the Dissertation may previously have been published in whole or in part. Multiple works already published may be submitted as a Dissertation if they are closely related in terms of time and subject matter and if they satisfy the overall requirements of a Dissertation. In this case, a summary of the findings shall be submitted, showing the relationship between the partial conclusions.”

2.1 Monographic Dissertation

The dissertation in the form of a monographic thesis offers the opportunity to deal with a topic in depth and in summary. The doctoral regulations of the IEF allow the results of a monographic dissertation to be published in advance. This pre-publication of research results and the discourse with the respective expert community are explicitly desirable and conceived as good practice. If parts of the dissertation are based on publications that have been co-authored, the share of contributions of the respective co-authors must be clearly stated. If previously published results are to be used in different theses (so-called "multiple use"), a justifying statement from the doctoral supervisor is also required.

2.2 Cumulative Dissertation

In addition to the monographic thesis, a cumulative dissertation is possible (also see Doctoral Regulations of the IEF, Section 6 (3)). Starting point for the cumulative dissertation should be an **outstanding publication record**. The core of the cumulative dissertation therefore consists of a series of **peer-reviewed articles** that have been published in **high-ranking journals or conferences** (the acceptance rate or rating of the conference must be stated here) with strict peer review. They should be closely related in terms of time and subject matter and address an overarching scientific question of the dissertation in greater depth. The expert reviewers are responsible for assessing the quality of the publications in the respective subject area. For a cumulative dissertation at the IEF, a **minimum number of three peer-reviewed and published articles is usually expected**, although as a rule - and especially in the case of shared authorship and multiple use - more publications can be assumed. Deviations require detailed justification by the supervisor. The doctoral candidate should **preferably be the first author** of these articles. At the very least, the doctoral candidate is expected to have made

significant scientific contributions. In addition to the peer-reviewed articles mentioned above, a cumulative dissertation may contain a small number of other contributions. Shared authorship as well as the multiple use of publications for different qualification theses are generally possible, but in any case require a **detailed clarification of the contribution shares of all co-authors.** If this clarification is not already part of the published article, the doctoral candidate should obtain a clarification confirmed by all co-authors and enclose it with the dissertation for submission. In the case of multiple use of publications, a justifying statement from the supervisor is also required. All articles must be submitted together with a **detailed introduction and summary** (also called *synopsis*) in bound form. The role of this summarizing text is to showcase and reflect on the connection between the various publications and the contribution to the scientific question as well as to emphasize the doctoral candidate's central contribution to the articles individually and in detail.

3 Self-citation in the Dissertation

As the research work presented in the doctoral thesis has generally already been published, self-citation is possible in the following way. Either a brief reference should be made at the beginning of the doctoral thesis as to which chapters are based on which publications and, in the case of co-authored publications, the author's own contribution to the individual publications should be emphasized, or it should be pointed out directly at the beginning of each chapter that the main results of the chapter have already been published. Due to reduced readability, it is not necessary to mark every literal adoption from own publications in the doctoral thesis. However, it should be noted that if the doctoral thesis is published, e.g., in the form of a book, the relevant publishing policy must be taken into account.

4 Use of Electronic Tools for Text and Image Generation

The availability of electronic tools for text and image generation requires compliance with extended guidelines for safeguarding good scientific practice and avoiding academic misconduct. The top priorities are transparency with regard to the tools used, scientific integrity, and the protection of intellectual property. The IEF refers to the current guidelines of the German Research Foundation (DFG)¹. In this sense, a detailed duty of scientifically adequate disclosure applies above all to the use of such tools in the dissertation.

5 Suspicion of Academic Misconduct

In the event of suspected academic misconduct, especially plagiarism, the Dean, the Academic Affairs Commission of the Faculty and the Ombuds Commission of the University of Rostock must be informed immediately. Furthermore, a committee of at least three professors (including the doctoral supervisor) must be set up to prepare background information for the Faculty Council in a timely manner. This also includes the hearing of the person affected by the suspicion of academic misconduct. The committee coordinates the procedure with the Ombuds Commission of the University of Rostock. The Dean or the Faculty Council will decide on the next steps at short notice. In any case, all further steps in the doctoral process are subject to reservation. All information regarding the suspicion of academic misconduct must

¹ In any case, the latest guidelines of the DFG apply.

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- <https://wissenschaftliche-integritaet.de/verwendung-generativer-modelle/>
- https://www.dfg.de/download/pdf/dfg_im_profil/geschaeftsstelle/publikationen/stellungnahmen_papiere/2023/230921_stellungnahme_praesidium_ki_ai.pdf

be treated with absolute confidentiality until the facts of the case have been clarified in order to prevent possible harm to the person concerned and those involved. The committee and the Faculty Council remain free to request additional scientific and legal expert opinions. In all other respects, the current rules for safeguarding good scientific practice and preventing academic misconduct at the University of Rostock apply.