

## **Guidelines for writing a dissertation**

The writing of a dissertation shall aim at the goals outlined in part 1 of the general doctorate regulations of the Ruhr-University Bochum:

*„With completion of the dissertation, the doctorate student shall prove the ability to undergo independent research work in his/her own research field.*

*The dissertation must comprise his/her own new scientific results and their presentation must meet scientific standards.“*

### **Acceptable formats of a dissertation are:**

- a) A monograph, consisting of previously unpublished continuous text, which only comprises a limited number of previously published parts of texts as citations.
- b) A publication-based format, which besides so far unpublished chapters, consists of verbatim excerpts from own publications or contributions from publications.
- c) A cumulative format comprising a compilation of complete already published journal articles or articles meant to be published soon.

### **General structure of a dissertation:**

Regardless of the chosen format, each dissertation should comprise the following parts:

1. An introductory chapter introducing the research topic, describing the actual state of the research at the beginning of the project and defining the objective of the PhD-project.
2. A main part describing the results of his/her own research work.
3. A concluding chapter summarizing the results of the research project, rating their relevance and classifying them according to the actual state of research.
4. Possibly, an appendix with additional experimental and/or technical details. Regardless of the chosen format of the thesis, experimental and/or technical details of important experiments or simulations reported in the thesis, must be documented in such a way that they can be reproduced. In case these details are not stated in the main part of the thesis for reasons of clarity, this can be done by referring to publicly available publications or in an appropriate appendix.

### **Quotations and adapted illustrations:**

Any literal or analogous quotations or previously published illustrations and data must be acknowledged as such. This also applies if taken from own publications or unpublished final papers (e.g. practical course reports, Bachelor/Master Theses). Also unpublished information or illustrations obtained from a private communication to third parties have to be acknowledged. When using previously published illustrations (even those published by yourself) written permission to reproduce them must be obtained from the copyright holder (usually the publisher) or a new illustration has to be produced. The original source should be acknowledged in the caption.

**Requirements for publication-based and cumulative dissertations:**

These formats have as well to comply with the afore stated formal requirements for the documentation of simulations and experimental results. Especially, with the use of publications in which — due to the journal format — experimental or technical data are only described in a shortened way or are not included at all, this missing information has to be added in an appendix.

When using publications by multiple authors including yourself, your own contribution has to be specified in a way that the reader can distinguish your work from the work of the co-authors (e.g. in the introduction or in the footnotes). Therefore, articles from shortened journal formats, publications with multiple co-authors with only a minor part written by yourself or review articles mainly discussing results from work of other authors, are usually not suitable for inclusion.

We, therefore, recommend you consult your supervisor or referee in this matter.

Previously published articles and book contributions should preferably not be changed, or changes should be made recognisable. In a cumulative dissertation the compiled articles should if possible be presented in the original format of the journal they are taken from.

Therefore, it is recommended that you use the same language as the respective articles or manuscripts when writing your thesis.

Furthermore, make sure that there is no violation of the copyright agreement with the publisher when copying already published work for your dissertation, ensure that permission has been obtained from the publisher. Always make sure that the permission also admits the electronic publication in line with your dissertation rules.

If a cumulative dissertation is chosen, the doctorate board recommends that you seek advice about format and contents from your supervisor and referees as early in advance as possible.