

# **Guidelines for Preparing a Dissertation Proposal**

(§ 8 doctoral regulations of the Computer Science Faculty  
of the University of Koblenz-Landau)

## **Purpose of Handout**

As defined in § 8 (3.6.) of the Doctoral Regulations, doctoral candidates must submit a proposal that outlines the central points of the planned dissertation project. The following information is intended to help candidates in the preparation of the dissertation proposal.

## **Formatting: Regulations and Recommendations**

There are two formal regulations for the dissertation proposal (see Doctoral Regulations):

- The description of the dissertation project should not exceed the maximum of 5000 words (excluding references and appendices)
- The dissertation proposal should be submitted electronically in a pdf-format (in addition to the submission in paper form with all other documents)

Additionally, doctoral candidates should ensure that the title page of the dissertation proposal contains the working title of the dissertation project, the candidate's name, the name(s) of the dissertation supervisor(s), and information on whether the candidate intends to pursue research towards the submissions of a monograph or a cumulative dissertation.

The Doctoral Committee uses the proposal to evaluate whether candidates have the ability to work scientifically at the level expected for a doctoral degree. Therefore, it is essential to propose a project of sufficient depth and significance and to use and cite relevant literature. It is recommended to select one of the standard citation and formatting styles (e.g., Harvard, APA) and prepare the document using the selected citation style. Candidates are strongly encouraged to submit a document with clear and consistent formatting to improve readability. The following guidelines should be used to help you prepare and structure your PhD proposal.

## **Content and Structure**

The purpose of the dissertation proposal is to describe the dissertation project to the Doctoral Committee and to convince the committee that the project is relevant and feasible. Thus, there must be a clear argument for the proposed work that flows throughout the proposal. To this end, candidates should outline that they have developed research objectives that are relevant to both research and practice. Furthermore, they should demonstrate that they have a well-thought-out strategy to achieve their objectives. To make a strong case for the dissertation project, the proposal should address the following points:

- 1) Research Background, Motivation, and Objectives
- 2) Research Strategy
- 3) Structure and Procedure

Table 1 provides an overview of questions to guide your writing to address each of the three points. Furthermore, Table 1 outlines information that could help the Doctoral Committee to evaluate the relevance and feasibility of the dissertation project.

There are many different approaches to undertaking scholarly research, therefore individual proposals will vary according to the research tradition being followed. The specific details of the research strategy and data requirements will vary significantly depending on the research approach being adopted and the type of research methods being used. Therefore, not all of the questions below may apply or have the same relevance to every dissertation project. The purpose of this section of the proposal is to provide clear details and justification for the choice of the research approach and methods being proposed. In FB4 these are wide ranging and cover approaches and methods including: design science research; experimental research; conceptual modelling, formal specification, interpretive/qualitative research; theory building; theory testing etc. Please provide details of the approaches and methods to be used.

**Table 1: Overview of Content**

<b>Research Background, Motivation, and Objectives</b>	
Relevance, Problem, and Motivation	<ul style="list-style-type: none"> <li>- What is the research topic/phenomenon of interest?</li> <li>- Why is the topic relevant to theory and practice?</li> <li>- What is the motivation for addressing this problem?</li> </ul>
Research Objectives, and Questions	<ul style="list-style-type: none"> <li>- What is the current state of literature in the research field?</li> <li>- What are the theoretical and practical limitations of current research?</li> <li>- What are the objectives of the dissertation? How does achieving these objectives help to address the limitation of current research?</li> <li>- Which research questions (or hypotheses) will help to achieve the research objectives?</li> </ul>
<b>Research Strategy</b>	
Research Approach	<ul style="list-style-type: none"> <li>- What is the approach to achieve the research objectives?</li> <li>- What theoretical basis will the research have?</li> </ul>
Data	<ul style="list-style-type: none"> <li>- What types of data are needed to answer the research questions?</li> <li>- (e.g., qualitative or quantitative data, cross-sectional vs. longitudinal data, object of study)</li> <li>- How will the data be obtained? (data collection methods)</li> </ul>
Data Analysis	<ul style="list-style-type: none"> <li>- How will the data be analysed? (data analysis methods)</li> <li>- How will the data/ results be presented?</li> </ul>
<b>Structure &amp; Procedure</b>	
Structure	<ul style="list-style-type: none"> <li>- What is the expected structure of the dissertation? What are the central parts of the dissertation?</li> <li>- How do the different parts of the dissertation build on each other?</li> </ul>
Research Phases	<ul style="list-style-type: none"> <li>- What are the different steps, phases, or cycles of the dissertation project? How are they linked to each other?</li> </ul>
Schedule	<ul style="list-style-type: none"> <li>- What is the expected completion date of the dissertation?</li> <li>- How much time is estimated for the different research phases?</li> <li>- What are the potential issues that could jeopardize or affect the schedule? What measures can be taken to avoid these delays?</li> </ul>

<b>Further Information (optional)</b>	
Publications and Transfer	<ul style="list-style-type: none"> <li>- What are the expected publication outlets (journals, conferences)?</li> <li>- What are the key target groups outside of research?</li> </ul>
Integration and Cooperation	<ul style="list-style-type: none"> <li>- How is the topic connected to the current research of the supervising professor or research group?</li> <li>- Are there existing or planned collaborations in the context of the dissertation? (e.g., with researchers, companies)</li> </ul>
Technical Requirements and Planning	<ul style="list-style-type: none"> <li>- What are the technical requirements to conduct the research?</li> <li>- Does the research group have the necessary technical equipment? If not, how will the equipment be obtained?</li> </ul>
Funding and Time Availability (external doctoral students)	<ul style="list-style-type: none"> <li>- Is there sufficient funding for the dissertation (and the time needed to complete the dissertation)?</li> <li>- Is there sufficient time for research to complete the dissertation (e.g., can you take time off work)?</li> </ul>

**Note:** (1) the sections in Table 1 are for guidance and will have varying importance/relevance according to the research paradigm and type of research being proposed; (2) the proposal does not necessarily have to present the topics and questions in the order shown above.

## **Appendices**

Authors are encouraged to use appendices to provide supplemental material (e.g., preliminary table of contents) and outline aspects that are not central to the content of the dissertation (e.g., information on structure and procedure, such as a project schedule/Gantt chart, or further information, such as technical requirements).