



GUIDELINES FOR DRAFTING AND WRITING THE DOCTORAL THESIS

The doctoral thesis is an original research paper, written by the doctoral student as part of the doctoral studies. The doctoral student bears the responsibility for the accuracy of the data and information presented in the thesis, as well as for the opinions and demonstrations it includes. The doctoral supervisor bears joint responsibility with the author of the thesis for the compliance with the quality or professional ethics standards, including for ensuring the originality.

These guidelines are for information purposes only, the content and structure of the doctoral thesis being decided by the doctoral student after consulting with the doctoral supervisor, and they shall comply with the drafting rules imposed by the doctoral school. The doctoral thesis shall include several segments which can be divided into sections (parts), chapters, subchapters, depending on particularities of the doctoral topic. The structure of the doctoral thesis usually consists of the following:

- Cover
- Contents
- List of tables, figures, symbols, etc.
- Abstract in Romanian (regardless of the language in which the thesis is written): 500 – 1000 words
- Abstract in English: regardless of the language in which the thesis is written): 500 – 1000 words
- Abstract in the language in which the thesis is written, if different than Romanian or English: 500 – 1000 words
- Introduction: Argument, Preliminaries
- Aim and objectives of the research, hypotheses, research questions
- Research methodology, instruments, materials and methods
- State of the art in the field / theoretical framework
- Presentation of the actual research: analysis, experiments, investigations, etc.
- Results
- Discussions
- Conclusions, original contribution, future research opportunities, research limitations, etc.
- Bibliography
- Annexes
- List of papers published during the doctoral stage in relation to the doctoral thesis topic
- The Statement of Authenticity.



Cover and Contents – please see “Template thesis EN” on the intranet at:

<https://intranet.unitbv.ro/Cercetare/Scoala-Doctorală-Interdisciplinară/Doctorat/Sustinere-teza>

List of tables, figures, abbreviations, symbols

Each table/figure shall be accompanied by the number, title and page number on which it can be found, in the order they appear in the thesis. The abbreviations and symbols used in the thesis are described and listed in alphabetical order.

Abstract in Romanian and English

The structure of the abstract will reflect the entire structure of the thesis. Thus, it will begin with a short introduction of the topic of the thesis. Then, it will underline the need and importance of the research. It will specify the research aim and objectives. It will briefly present the methodology, focusing on the novelty elements. The most substantial part of the abstract must be devoted to the personal results, and it will end with a conclusion indicating the research implications and impact. The abstract must be mandatorily written in Romanian and in English. Please see “Template rezumat RO” and “Template abstract EN” on the intranet, at:

<https://intranet.unitbv.ro/Cercetare/Scoala-Doctorală-Interdisciplinară/Doctorat/Sustinere-teza>

Introduction: Argument, Preliminaries

The doctoral students shall start by framing the topic within a larger context. In the beginning, they will present, based on the available bibliography, general aspects accepted by the scientific community in the field, so that the reader can understand better the research area. Then, they will identify the area (niche) in which no research has been conducted or in which the results of the existing research are contradictory or considered insufficient to be valid. It is very important to conduct a critical analysis of the state-of-art and to identify new research directions. In other words, they must supply enough arguments to justify the necessity, novelty and importance of the research to be conducted. Presenting the state-of-the-art concerning the topic approached must include relevant information, but without details which will be supplied later in the theoretical part or as part of the interpretation of the results. The students will consult both reference works in the field and recently published works (if any) which approached similar problems. The introduction will also mention and shortly explain the theories/concepts/notions which are used throughout the paper and are necessary to understand the objectives of the doctoral thesis.

▣ Aim and objectives of the research, hypotheses, research questions Formulating the research aim and the objectives (as well as the hypotheses) must be based on the critical analysis of the current state-of-the-art in the field. The aim reflects the intention or general orientation of the research in order to solve the problem (problems) identified or to develop a relevant theoretical contribution. By contrast, the specific research objectives (the general and operational objectives) must be aimed at concrete and measurable results.

Research methodology, instruments, materials and methods

This section mentions all the information necessary to repeat the observations/experiments/calculations. The work methodology can be described for each objective individually. The text must not include useless details, especially when using well-known methods. For each



separate objective, the doctoral student will formulate questions, develop concepts/models and issue working hypotheses. This section must also include, depending on the specificity of the thesis, information about the place of the research, the studied organisms, the sampling used, the materials used, the period of data collection, the description of the experiment, the equipment and the programmes used, the conditions for conducting the experiment and the analyses. The information can be presented as tables and charts. The well-known methods, described in detail by others, will be presented based on the available bibliography. The choice of certain working methods and tools must be supported by arguments. The doctoral student must also specify what type of tests, models, parameters was used in the analysis and statistical processing of the data (as appropriate). The students will also state the software packages used, including the versions and/or data of accessing the site, if the programmes are available online. Usually, this section is finalized after obtaining the results, because at this moment the doctoral student will not know for certain what working methods will still be available out of the multitude of methods tested during the research.

State of the art in the field / theoretical framework

This section presents extensively, but in the form of a synthesis, the scientific literature, the theoretical and conceptual framework in which the proposed doctoral research is included and based upon. Where appropriate, this section may provide a diachronic overview of the research relevant to the PhD. thesis, up to the state of the art in the field. In this endeavor, the doctoral student proves his knowledge of the fundamental and specialized literature, on which the proposed research is built and developed.

Presentation of the actual research: analysis, experiments, investigations, etc.

This chapter is dedicated to the description of the scientific approach, the application of the previously indicated research methodology and tools. In the presentation of the research itself, the stated aim and objectives are to be taken into account. The analysis/experiments/investigations will be undertaken and described in logical sequence to ensure the coherence of the scientific approach and the generation of valid results.

Results

In this chapter, the doctoral student shall present clearly and coherently the results obtained following the research described in the previous chapter. The results obtained are expressed as answers to the aims / hypotheses / problems under investigation and are the most important part of the thesis. This section presents the data obtained as a result of the doctoral student's own research for each objective targeted, in one or several sections. The presentation under the form of charts and tables, accompanied by references and explanations in the text, is preferred but without repeating all the information from the table/chart. In this part of the paper, the doctoral student will quote from other authors only exceptionally, because this section is dedicated to the student's own results. The doctoral student must not report on all the data obtained as a result of the observations or experiments, but only on those which are relevant and representative, which help support the aims mentioned at the beginning of the research. At the same time, the unexpected results should not be omitted, even though they may not, for example, support the hypothesis or lead to the expected result.

Discussions



Usually, the interpretation (discussion, comment) of the results is done in a separate section, but in certain cases it can be performed when the results are presented, in a section entitled *Results and discussions*. The discussion entails an overview of the initial objectives (questions, hypotheses) and supplying answers based on the student's own data. The results do not have to be repeated in detail, only to the extent that they support the important ideas of the discussion. The student's own results must be supported by data from the specialized literature, especially by reference works in the field. However, in certain cases, they may be considerably different from the results of previous research. These differences/deviations or different points of view must be highlighted and discussed. The doctoral student will try to provide an explanation, without speculating too much, identifying possible causes (for example, the size of the sample, the conditions in which the experiment was conducted, the size and quality of the examined material). The critical analysis of the previous studies must be done with objectivity and caution, because the student might not have fully grasped the meaning of what was reported in the literature.

Conclusions, original contribution, future research opportunities, research limitations, etc.

The conclusions represent a synthesis of the main results obtained and of their consequences. This section should not include any new information in addition to what was mentioned previously in the discussion of results. This is a somewhat repetitive section because the answers to the questions were already provided in the discussion part. However, because many readers consult mainly the final part of the thesis, the main results and their importance should be highlighted. In some cases, the final part of the thesis underlines the most important *original or personal contributions*. These contributions should be mentioned in detail. Nevertheless, it should be pointed out that the thesis as a whole is an original work. Any research has some limitations which should be recognized by the author, thus not giving the chance to the committee members (assessors) to identify them and formulate critical observations to this end, especially if they are obvious.

Bibliography

All the references in the text must be included in a final list placed at the end of the thesis, and all the works mentioned in the bibliography should be quoted in the thesis according to the citation style specific for each doctoral field. Considering the high number of resources consulted in writing a doctoral thesis, it is very useful to use reference management software. There are free of charge software programmes, such as Mendeley, which allow you to choose the citation style (for example, APA, Harvard) or even to define a personal style. Irrespective of the choice, it is important to use the chosen style in the entire paper.

Annexes

They can include tables with primary data, methodological details, input files for programmes, detailed results of simulations, etc. Each annex shall have a number and a name.

List of publications

The doctoral title is granted depending on the fulfilment of certain minimal standards at national level, which consist mainly in publishing scientific articles resulting from the doctoral research and the results obtained within this research. For this reason, it is mandatory to include a list of publications written during the doctoral studies along with all the details necessary to identify them (including the link and the international database in which they were indexed). Participating in



specialised conferences may be another mandatory condition, this is why the papers presented at scientific manifestations must also be mentioned. The name of the author of the doctoral thesis shall be highlighted (for example, in bold) to distinguish it from the names of the other co-authors, if applicable.

Statement of Authenticity

The Statement of Authenticity shall be handwritten, signed in original and shall be annexed at the end of the thesis, as an integral part thereof. Please use Annex 4, found on intranet:

<https://intranet.unitbv.ro/Cercetare/%C8%98coala-Doctoral%C4%83-Interdisciplinar%C4%83/Doctorat/Sustinere-teza>

Writing recommendations

It is recommended to write the thesis using the UT Sans font and the components of visual identity of the university/faculty in question (which can be downloaded from <https://intranet.unitbv.ro/Documente/Identitate-vizuală-UNITBV/Fonturi>), 11 pt, one line spacing, Justified alignment, no paragraph indentation. The chapters will always begin on a new page.