

BINDING GUIDELINES FOR WRITING BACHELOR'S/MASTER'S/PHD THESES

A bachelor's/master's (diploma) thesis proves the student's proficiency and the skills he/she has gained in the course of his/her studies, as well as his/her abilities to apply them when solving technical and specialist problems concerning the field of study. A PhD thesis (dissertation) verifies the ability to produce original scientific results, which should be published mainly in international journals and conference proceedings.

The topics of bachelor's theses are based on the issues the specific department deals with. In a bachelor's thesis a student proves his/her ability to solve a problem assigned to him/her, to manage the technical language, and to work with specialised literature and technical standards. A bachelor's thesis may be prepared in the company where the student undergoes his/her practical training. In the course of the practical training the student applies his/her theoretical knowledge and skills, and acquires practical experience.


The topics of master's and PhD theses are based on the social needs and the plan of research and development activities at the University, Faculty, and specific departments. In a thesis, a student has to endeavour to prove his/her abilities, the essential skills of putting his/her thoughts into words in a technically clear manner and as precisely and adequately as possible, and that he/she has a good knowledge of the specialised literature and technical standards, as well as their application.

The bachelor's / master's and PhD theses (hereinafter referred to as "theses") must be submitted through the EDISON information system (hereinafter referred to as „IS EDISON“) and must not contain any signatures or other personal data.

The bachelor's / master's theses are submitted only electronically. In addition to the electronic form, the PhD theses are also submitted in two copies bound in stiff covers (hardback; black covers are recommended). PhD theses are printed on both sides on an A4 paper.

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Declaration made by the student

From the academic year 2020/2021, the student's declaration concerning the authorship is realized only electronically through IS EDISON, and is as follows: ***"I hereby confirm the submission of the digital version of my thesis. I declare that I have written this thesis independently. I have listed all the literary sources and publications from which I have drawn my knowledge."*** The supervisor of the bachelor's/master's thesis is entitled to check whether the bachelor's/master's thesis was completed by the student on his/her own. Any attempt at fraud will be prosecuted.

Declaration made by the cooperating legal or non-legal person

Should the student make use of data provided by a commercial entity and the data is deemed sensitive, but possible to disclose, such a fact has to be added to the declaration, confirmed by a representative of the cooperating legal or non-legal person. The student submits the declaration to his / her specific department by the deadline for submitting the thesis, the declaration will be uploaded to IS EDISON and stored in the student's file. **A template of the declaration is given in Annex 1.**

Cover and Front page

The cover PhD thesis and the inner front page thesis are to be as follows:



The use of the logo must correspond to the uniform visual style of VSB-TUO, choose the height of the logo 3 cm (including the protection zone). **The title of the thesis on the front page must be identical to the title given in IS EDISON!**

Assignment of bachelor's/master's thesis

The assignment of the bachelor's/master's thesis is since the academic year 2020/2021 published in an electronic form only (without signatures) in IS EDISON (the thesis must be in the assigned state). The student inserts this unsigned assignment into the bachelor's/master's thesis. The signed original will be a stored in the student's file.

Abstract and keywords

The next separate page is dedicated to an abstract and keywords. Under the heading "Abstract" the content of the thesis is summarised in approximately 10 lines.

After the heading "Keywords" the list of keywords is given. A term consisting of more than one word can also be considered a keyword.

Both the abstract and keywords are given first in the English and below also in the Czech language.

For PhD theses, the abstract is also extended by the contribution of the work. The English and Czech versions are then on a separate page.

By the deadline for submitting the bachelor's/master's thesis, the student must also submit the text of the abstract and keywords in electronic form, in both the English and Czech languages, to the IS EDISON, according to the instructions given by the specific department.

Acknowledgement

Optionally, it is possible to include an acknowledgement on a separate sheet, for example, to the supervisor for professional guidance, family for support, etc. Acknowledgement to projects from which the work was supported can be also provided (especially in the case of PhD theses).

Table of Contents

The table of contents of the thesis is written on a separate page. It contains all relevant chapters, sub-chapters, and sections of the textual part of the thesis, together with the corresponding page, i.e. the List of Symbols and Abbreviations Used, List of Images and Charts, Introduction, the Thesis (i.e. all chapters and sub-chapters), Conclusion, References, List of the Student's Own Publication Activities and Other Outcomes (applicable to PhD theses only), List of the Student's Self-citations (applicable to PhD theses only), List of Projects (applicable to PhD theses only), and Appendices (if part of a thesis). The table of contents does not include the Front page, Assignment, Abstract, and Keywords.

List of symbols and abbreviations used

The list of symbols and abbreviations used (if given) replaces explanations in the text. Symbols (abbreviations) are listed in alphabetical order, capital letters before the small letters of the Latin alphabet. Should a symbol stand for a physical quantity, its unit is given as well.

List of images and charts

The list of images (i.e. pictures, graphs, diagrams, etc.) must contain the number, title, and page number of the image (or page numbers). The list of charts must also contain the number, title, and page number of the chart (or page numbers).

Introduction

The first chapter of the thesis is headed 'Introduction'. It sets the issue to be solved into a broader context and defines the structure of the thesis in the form of brief contents of individual chapters.

Actual thesis

In the chapters immediately following the Introduction the objective of the thesis is formulated, the current state of the issues is outlined, and the theoretical and professional characterisations of the issues to be solved, as well as the stages of their solution, are specified.

In the succeeding chapters the student specifies the approach to the issues to be solved. The chapters and sub-chapters have to be logically ordered; their extent should be in correspondence with the importance of the issues being solved. It is advised to insert suitable graphical information (figures, tables, charts, schemes, etc.) into the text to make it clearer.

All mathematical conclusions and calculations have to be presented in detail and arranged in such a way that every specialist could prove their correctness without any difficulties. In all statements, formulae, and values borrowed from practice – if not derived directly in the thesis – the source given in the References has to be cited. Important data or conclusions taken from the literature also have to be quoted from the sources given in the References. Formulae and equations are numbered in parentheses on the right.

In the whole thesis only the legal SI system of measurements must be used. The individual chapters of the thesis are, as a matter of principle, numbered according to the decimal system using Arabic figures. The list of chapters which do not need to be paginated: Introduction, Conclusion, References, List of Student's Own Publication Activities and Other Outcomes, List of Student's Self-citations, List of Projects, Appendices. Actual pages of appendices are numbered separately using another series of numbers or letters.

A PhD thesis describes mainly original methods published in the outcomes listed in the List of Student's Own Publication Activities and Other Outcomes that are cited in the text.

Conclusion

In the final chapter the results achieved are evaluated and the student's own contribution is specified. An evaluation from the standpoint of the further development of the project is also obligatory. The student also mentions his/her experience of the project under study and mentions relationships to other just-completed projects (completed in the framework of other bachelor's/master's theses in the particular academic year or projects being worked on in external departments).

References

Only sources from the literature cited in the textual part are given in the References. The literature is cited as follows: the author, the title of the book or article (in the original language or Latin transcription from Cyrillic, etc.), volume, edition, publishing house, place and year of issue. According to the ISO 690 standard the list of references is written on a separate page. It is also possible to use the CitacePRO system, to which the university has institutional access <https://www.citacepro.com/>.

List of student's own publication activities and other outcomes

The list of the student's own publications and other outcomes (patents and applied models) can be found only in a PhD thesis and must be divided into outcomes related to the topic of the thesis and outcomes unrelated to the topic of the thesis. Outcomes related to the topic of the thesis must be cited in the thesis. The description of a publication also includes the type of publication (an article in a journal or conference proceedings) and indexing (Web of Science, SCOPUS) or impact factor or SJR of results published in journals. The description of a publication must explicitly state whether the article was published/accepted for publication/sent to the review process.

List of student's self-citations

PhD theses must include a list of the student's self-citations. In the case of non-self-citations of the student's own publications, the list of the student's self-citations includes self-cited publications with a list of non-self-citations.

List of projects

In the case of PhD theses, a list of projects the PhD student participated in may be given.

Appendices

Appendices contain all graphic works, larger figures (e.g. photos, schemes, drawings, etc.), sizable tables and drawings which are not included in the text as figures or tables, and parts of the thesis of a distinctly descriptive character (e.g. a manual for applying a set-up system, fragments of a source text, comprehensive detailed schemes and detailed descriptions of the parts of the project being solved, etc.).

The list of appendices is given on a separate page. The appendices are numbered using a separate number line (e.g. Roman numerals) or letters. For each appendix in the list the following information are put: the number of the appendix, title and specification. If there is a printed appendix of PhD thesis, the specification means the number of pages (if there is a front page in the appendix, the number of pages includes the front page); if drawings are inserted into the thesis pocket the specification means the size of the drawings (for example A3) and, in the case of electronic appendices, the specification includes the text "Appendix in IS EDISON" and the content of the appendices.

Requirements for content, extent, typographical layout, and language style

In the thesis, the objective of the thesis must be formulated, the characterisation of the actual state of the issues must be outlined, and the theoretical and professional grounds of the issues to be solved must be specified.

The thesis must be drawn up in such a way that it can be published in full. For example, if the thesis contains corporate data, it is necessary to present it in the thesis with a regard to protecting the firm's know-how (this is confirmed by that firm signing the "Declaration of the representative of the cooperating legal or non-legal person"). For example, the data in the thesis can be anonymised according to the instructions of the thesis supervisor, and more detailed data can be presented only at the thesis defence.

The number of pages is not limited. However, the appropriate length is to be kept to and the importance and the adequacy of the extent of relevant appendices for evaluating the thesis, as well as for pertinent follow-up theses in the future, are to be taken into consideration. The minimum number of pages of a bachelor's thesis is 25 pages (from the Introduction up to the Conclusion), that of a master's thesis is 40 pages, and a PhD thesis is 60 pages. The number of pages in appendices is not limited.

Every first-level chapter and every appendix should start on a new page. All numbered pages of the thesis can show the relevant chapter title of the first level in their headings. All pages are numbered, beginning with the Table of Contents. However, all pages from the front page are included in the numerical series (e.g., if the following pages are single-sided – Front Page, Assignment, Abstract and keywords, Acknowledgement – the Table of Contents will begin on page 5). Appendices without the possibility of inserting page numbers must have a front page, which will specify the appendix and its title and page number.

Use only the Latin Modern or Palatino font for LaTeX, the Calibri font for Microsoft Word, and Carlito font for LibreOffice or OpenOffice. The font size must be 11 points. For headlines of various levels choose the type size according to the typographical recommendations (e.g., if using the LaTeX system, follow the setting defined by the "book" style). Text paragraphs are aligned to blocks using hyphenation. The recommended margins are specified in Fig. 1. Should the DTP program not define the recommended line spacing, choose the spacing corresponding most closely to 120 per cent of the basic font used. In the case of a printed PhD thesis (with a double-sided typesetting), you can enlarge the inside margin for the purpose of binding, and we recommend starting with the first-level chapters always on the right side (with the possible insertion of vacancies).

Fig. 1 Recommended text format

		Size
Page format		A4
Font of the textual body	Calibri (for Microsoft Word) or Carlito (for LibreOffice or OpenOffice)	11 point
	Latin Modern or Palatino (for LaTeX)	11 point
Page margins	Top, Bottom, Left, Right	2,5 cm
Line spacing		1.2

The quality and purity of the language also play an important role when the level of the potential bachelor/engineer/PhD graduate is being evaluated. Adherence to English orthography and professional terminology is expected. The use of slang and colloquial expressions is not allowed. Should you have doubts about the translation or transcription of foreign terms, consult the literature available in the University Library. Theses published in the Slovak or English languages are also expected to maintain the linguistic quality corresponding with given theses.

Typesetting programs of the thesis

Students of the Faculty of Electrical Engineering and Computer Science are expected to use DTP programs when writing their theses (or other projects) which provide for the use of proportional fonts and adherence to the basic typographic rules. Considering the fact that these tools are available at the Faculty, their application is required.

To typeset the text of the thesis, the use of one of these tools is required:

- **LaTeX**
- **Microsoft Word**
- **Apache OpenOffice / LibreOffice Writer**

The supervisor of the thesis is authorised to insist on the use of one of the above-mentioned tools, including the relevant version thereof. If not otherwise defined, the student uses the most recently available version of the DTP program commonly used at the Faculty of Electrical Engineering and Computer Science (this refers especially to Microsoft Word users). By agreement with a supervisor, it is possible to choose another DTP program.

Components of a thesis completed in electronic form

The following parts of a thesis are submitted in electronic form to IS EDISON:

- Abstract and keywords in the English language.
- Abstract and keywords in the Czech language.
- Actual thesis – the complete thesis is saved in PDF/A format. The maximum size is 20 MB. The file name has the format: “year of submission_student’s login_type of thesis (BT/DT/PhDT)”.
- Appendices – they are inserted only if they are not part of the thesis itself, i.e., these appendices are enclosed on CD/DVD together with the printed original. Alternatively, large schemas, drawings etc. are located in the pocket of the printed PhD thesis. Only one ZIP file is to be inserted into IS EDISON, the size of which should not exceed 30 MB. The file name has the format: “year of submission_student’s login_type of thesis (BT/DT/PhDT)_appendix”.
- Summarized report – it is inserted only for PhD theses under the file name “submission year_student’s login_PhDT_summarised_report”, the maximum file size is 8 MB. From the academic year 2021/2022, the abstract is not required, but a obligatory part of the curriculum vitae submitted for the defense of the PhD thesis is a list of own publications and other outputs, possibly also a list of their citations.
- If necessary, the supervisor of the thesis can extend this limit up to 500 MB. In the event of insufficient capacity, it is necessary to request an increase in capacity (max. 4 GB, at least one week before the deadline for submitting the thesis, to the secretary of the department, who then submits the application to the Vice-Dean for Studies.

Further instructions on the uploading of the thesis, including the procedure for correct PDF/A format creation, are available in IS EDISON. After the conversion into PDF/A format, it is necessary to check the correctness of the conversion, for example of formulae, document readability etc.

Further, the student ticks the box “I hereby confirm the submission of the digital version of my thesis. I declare that I have written this thesis independently. I have listed all the literary sources and publications from which I have drawn my knowledge.”. The uploaded thesis is subsequently sent to the THESES system for plagiarism checking.

October 15, 2021

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