UNIVERSITY OF TARTU

Institute of Computer Science

      Curriculum

Microsoft Office User

Title

Master’s Thesis (30 ECTS)

Supervisor(s):      

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Title

Abstract:

This paper gives a template to theses. It provides the styles, automatisation examples, and instructions on how to write effectively using Microsoft Word.

Keywords:

Layout, formatting, template

**CERCS:**

Pealkiri eesti keeles

Lühikokkuvõte:

Selles mallis kirjeldatakse ingliskeelse lõputöö mall, stiilid ja antakse soovitusi töö teostamisel kasutades Microsoft Wordi.

Võtmesõnad:

Kujundus, paigutus, mall

**CERCS:**

Table of Contents

[Introduction 4](#_Toc102461103)

[1 Terms and Notations 5](#_Toc102461104)

[2 Background 6](#_Toc102461105)

[3 MS Word Editing Best Practices 7](#_Toc102461106)

[3.1 Text Formatting 7](#_Toc102461107)

[3.2 Capitalisation 7](#_Toc102461108)

[3.3 Inserting Figures, Tables, and Listings 7](#_Toc102461109)

[3.4 Using Bibliography 8](#_Toc102461110)

[3.5 General Use 9](#_Toc102461111)

[Change Tracking 9](#_Toc102461112)

[Document Comparison 9](#_Toc102461113)

[4 This Template 10](#_Toc102461114)

[Conclusions 11](#_Toc102461115)

[References 12](#_Toc102461116)

[Appendix 13](#_Toc102461117)

[I. Glossary 13](#_Toc102461118)

[II. License 14](#_Toc102461119)

# Introduction

This template is meant to provide you with a template of your thesis and give you an introduction to the basics of formatting your thesis. The template is built according to the guidelines published by the Institute of Computer Science at its guidelines page[[1]](#footnote-1). The normative requirements for theses are listed in the guide to the writing and defense of 3+2 curricula graduation thesis [[1](#Mat14),[2](#Cou14)].

The template contains the styles needed for writing a thesis, examples of best practices, and a suggested outline of the thesis. The background section gives a brief introduction to the requirements you should keep in mind when writing the thesis. It is followed by a section on best practices for using Microsoft Word® for editing your thesis. Section 5 gives brief instructions to using the template effectively. There is a placeholder for conclusions of your thesis and a sample of references. The template also includes a template for a summary in Estonian and an example of an Appendix.

# Terms and Notations

In order to ensure that everybody understands the thesis the same way, it is helpful to clarify the terms and notations used in the text. If there are only a few terms and notations used in the thesis, these can be explained at their first occurrence or in a subsection of introduction or background chapters. Well known terms do not have to be explained.

**Term** (Estonian *termin*) is a word or phrase used to describe a thing or to express a concept, especially in a particular kind of language or branch of study[[2]](#footnote-2). Terms are commonly defined in term standards or speciality dictionaries. The meaning and usage of a term in a given field can differ substantially from its usage in common speech.

**Notation** (Estonian *mõiste*) is a note, annotation or a series or a system of written symbols to represent abstract ideas[[3]](#footnote-3). The same words can be used to refer to different ideas. Therefore, it is helpful to describe the use and meaning of the notations you use in the thesis in order to ensure common understanding of your work. This is especially true for notations that can be understood in different ways.

**Metadata** (Estonian *metaandmed*) are data about data elements, including their data descriptions, and data about data ownership, access paths, access rights and data volatility[[4]](#footnote-4). For example, the properties of a file on a computer are its metadata. In Microsoft Word you can find your document’s metadata on the info panel in the menu „File“.

# Background

Even though the thesis needs to be submitted electronically, many of the reviewers prefer a printout for review. Correspondingly, the thesis needs to be formatted according to the principles of printed documents. For example, you should prefer fonts with serifs as these are easier to read in large paragraphs [[3](#Kohatäide1)]. Similarly, one should keep in mind typographic cueing principles of printed text in order to make emphasising your texts effective [[4](#Fos77)]. Many of the principles are enforced by the normative and guiding documents published by the university, faculty, and the institute. You should note that typographical and layout properties affect legibility differently for printed and on-screen documents [[5](#Dil92),[6](#Ber92)].

# MS Word Editing Best Practices

Microsoft Word® is an easy-to-use text editing and formatting software. This also means that it can be easily misused. Nevertheless, one can avoid lots of problems by following some of the best practices. If you need to learn more about using Microsoft Word, please see the tutorials at <http://word.mvps.org/Tutorials/> and the users’ guide at Addbalance[[5]](#footnote-5).

## Text Formatting

Most beginner mistakes when using Microsoft Word can be tracked back to improper techniques for formatting the text. In order to ensure consistent formatting throughout the document (and make flawless application of document styles and templates possible) one should avoid mixing content with formatting. In short, all formatting should be applied using formatting styles. Changes to formatting of text, paragraphs, or headings should be made to the corresponding styles as that changes the formatting throughout the document instead of just in a single instance. Some of the common mistakes in confusing formatting with content are listed in Table 1. You can find more common mistakes at publishers’ sites [[7](#Mar12)].

## Capitalisation

Table 1. Common formatting mistakes.

|  |  |
| --- | --- |
| Mistake | Solution |
| Using double return to generate whitespace (e.g. as paragraph break). | Use paragraph’s spacing settings to generate whitespace. Double returns mean an empty paragraph, which paragraph styles are applied to. Thus, changing document-level styles or document style-sets will result in undesired layouts. |
| Paragraphs are formatted differently across the document. | Use paragraph styles and change them as necessary. If you make changes to an individual paragraph, you can use context menu to update the style accordingly as well. |

The capitalisation rules for U.K. English[[6]](#footnote-6) and U.S. English[[7]](#footnote-7) state that all principal words in a title should be capitalised. In Estonian, only the first word is capitalised[[8]](#footnote-8).

## Inserting Figures, Tables, and Listings

Even the best layout engines need as much help at layouts as possible. You can help Microsoft Word layout engine at laying out figures, tables, and listings by putting them and their captions into text areas. This ensures that the embedded objects and their captions stay together. The captions of tables should be on top and all other captions should be on the bottom of the captioned object. See Table 1 and Figure 1 for example.

You should avoid positioning your embedded items at the bottom of a page. At the bottom of a page they might end up covering each-other or footnotes. Thus, it is better to position the items relative to the paragraph or aligned to the middle side (for half-width or smaller items) or top of the page (in case of large items that would disrupt the flow of text). It is best to position your embedded items after you complete writing the document as added content might cause the items to get repositioned. You can choose the paragraph you want the item to follow by moving the item’s anchor to it (enable “Show symbols” to see the anchor). You can prohibit Word (and yourself) from moving the anchor by locking it from the positioning dialog.

When inserting a graph or a diagram, you should make sure it uses the same or compatible colour scheme with your thesis. In Microsoft Visio and Microsoft Excel you can switch to the colour scheme used by your thesis via the layout/design menu. In order to avoid unwanted changes to Excel graphs, you could copy them as pictures for printing and paste the image instead of an Excel object into your thesis. Keep in mind that Excel objects in your thesis do change when you make changes in the original Excel file, images don’t.

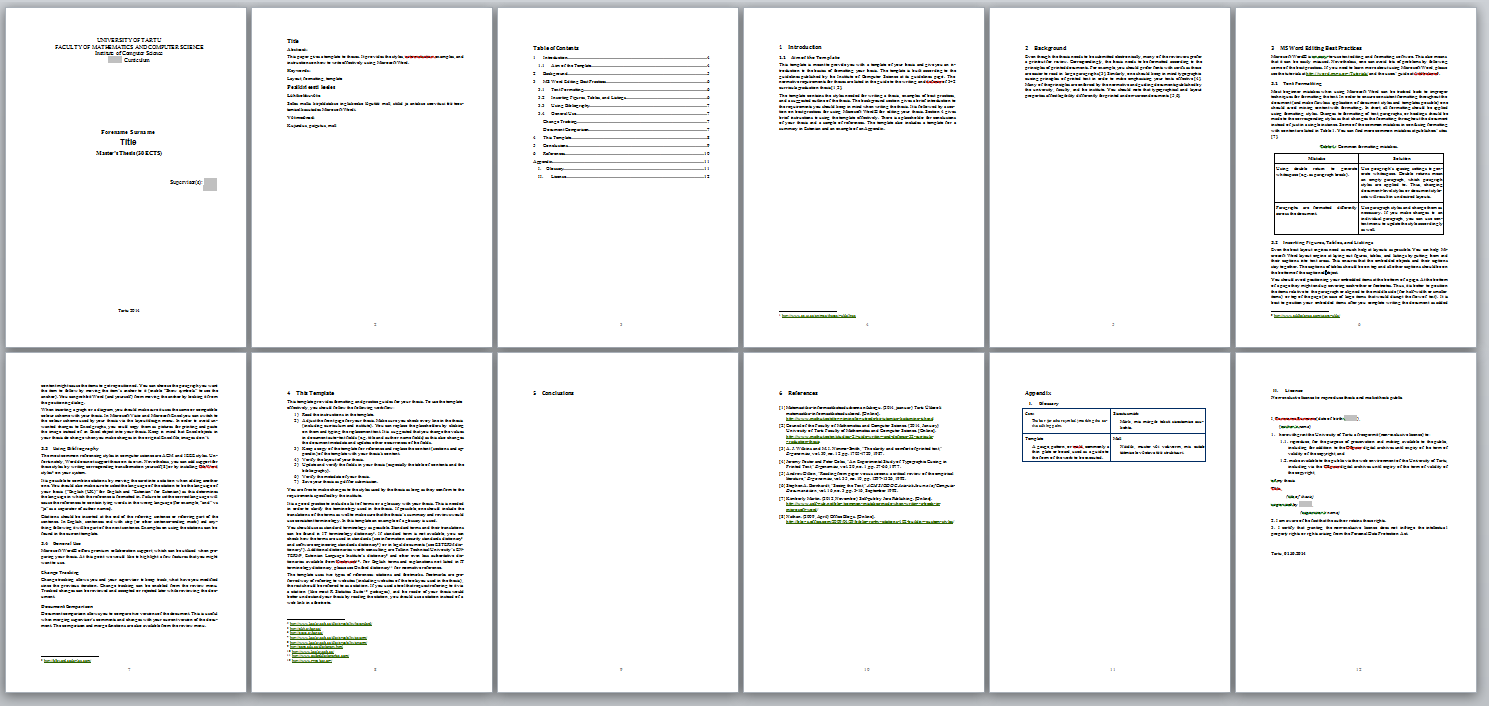


Figure 1. Snapshot of the thesis template.

## Using Bibliography

The most common referencing styles in computer science are ACM and IEEE styles. Unfortunately, Word does not support these on its own. Nevertheless, you can add support for these styles by writing corresponding transformation yourself [[8](#Nat09)] or by installing BibWord styles[[9]](#footnote-9) on your system.

It is possible to combine citations by moving the caret into a citation when adding another one. You should also make sure to select the language of the citation to be the language of your thesis (“English (UK)” for English and “Estonian” for Estonian) as this determines the language in which the reference is formatted in. Failure to set the correct language will cause the references to contain tying words in the wrong language (for example, “and” vs “ja” as a separator of author names).

Citations should be inserted at the end of the referring sentence or referring part of the sentence. In English, sentences end with stop (or other sentence-ending mark) and anything following it will be part of the next sentence. Examples on using the citations can be found in the current template. Please remember to remove the example references from the final document via the “Manage sources” menu option.

## General Use

Microsoft Word® offers premium collaboration support, which can be utilised when preparing your thesis. At this point we would like to highlight a few features that you might want to use.

### Change Tracking

Change tracking allows you and your supervisor to keep track, what have you modified since the previous iteration. Change tracking can be enabled from the review menu. Tracked changes can be reviewed and accepted or rejected later while reviewing the document.

### Document Comparison

Document comparison allows you to compare two versions of the document. This is useful when merging supervisor’s comments and changes with your current version of the document. The comparison and merge functions are also available from the review menu.

# This Template

This template provides formatting and practice guides for your thesis. To use the template effectively, you should follow the following workflow:

1. Read the instructions in the template.
2. Adjust the front page for your thesis. Make sure you check every line in the thesis (including curriculum and institute). You can replace the placeholders by clicking on them and typing the replacement text. It is suggested that you change the values in document auto-text fields (e.g. title and author name fields) as this also changes the document metadata and updates other occurrences of the fields.
3. Keep a copy of the template for reference and replace the content (sections and appendix) of the template with your thesis’s content.
4. Verify the layout of your thesis.
5. Update and verify the fields in your thesis (especially the table of contents and the bibliography).
6. Verify the metadata of your thesis.
7. Save your thesis as pdf for submission.

You are free to make changes to the styles used by the thesis as long as they confirm to the requirements specified by the institute.

It is a good practice to include a list of terms or a glossary with your thesis. This is needed in order to clarify the terminology used in the thesis. If possible, one should include the translations of the terms as well to make sure that the thesis’s summary and reviews would use consistent terminology. In this template an example of a glossary is used.

You should use as standard terminology as possible. Standard terms and their translations can be found in IT terminology dictionary[[10]](#footnote-10). If standard term is not available, you can check how the terms are used in standards (see information security standards dictionary[[11]](#footnote-11) and software engineering standards dictionary[[12]](#footnote-12)) or in legal documents (see ESTERM dictionary[[13]](#footnote-13)). Additional dictionaries worth consulting are Tallinn Technical University’s ENTERM[[14]](#footnote-14), Estonian Language Institute’s dictionary[[15]](#footnote-15) and other even less authoritative dictionaries available from Keeleveeb[[16]](#footnote-16). For English terms and explanations not listed in IT terminology dictionary, please see Oxford dictionary[[17]](#footnote-17) for normative reference.

The template uses two types of references: citations and footmarks. Footmarks are preferred way of referring to websites (including websites of the tools you used in the thesis), the rest should be referred to as a citation. If you used a tool that request referring to it via a citation (like most R Statistics Suite[[18]](#footnote-18) packages), and the reader of your thesis would better understand your thesis by reading the citation, you should use a citation instead of a web link in a footnote.

# Conclusions

# References

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| --- | --- |
| [1] | Loodus- ja täppisteaduste valdkonna lõputöödele esitatavad nõuded ja kaitsmise kord. 2016. <http://reaalteadused.ut.ee/et/oppetoo/loputoodele-esitatavad-nouded-kaitsmise-kord> (23.03.2017) |
| [2] | Requirements for graduation thesis and procedure for defence in the Faculty of Science and Technology. 2016. <http://reaalteadused.ut.ee/en/tuition/requirements-graduation-thesis-and-procedure-defence-faculty-science-and-technology> (23.03.2017) |
| [3] | Wilkins A.J.; Nimmo-Smith M.I.. The clarity and comfort of printed text. *Ergonomics*, 1987, vol. 30, no. 12, pp. 1705–1720. |
| [4] | Foster J.; Coles P. An Experimental Study of Typographic Cueing in Printed Text. *Ergonomics*, 1977, vol. 20, no. 1, pp. 57–66. |
| [5] | Dillon A. Reading from paper versus screens: a critical review of the empirical literature. *Ergonomics*, 1992, vol. 35, no. 10, pp. 1297–1326. |
| [6] | Bernhardt S.A. Seeing the Text. *ACM SIGDOC Asterisk Journal of Computer Documentation*, 1992, vol. 16, no. 3, pp. 3–16. |
| [7] | Kimberly M. Self-pub by Jera Publishing. <http://www.self-pub.net/blog/common-mistakes-made-when-writing-a-book-in-microsoft-word/> (23.03.2017) |
| [8] | Kwan N. Office Blogs. <http://blogs.office.com/2009/04/29/bibliography-citations-102-building-custom-styles/> (23.03.2017) |

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Appendix

1. Glossary

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| --- | --- |
| Caret  The bar (or other symbol) marking the active editing point. | Sisestusmärk  Märk, mis märgib teksti sisestamise asukohta. |
| Template  A gauge, pattern, or mold, commonly a thin plate or board, used as a guide to the form of the work to be executed. | Mall  Näidik, muster või valuvorm, mis esitab täitmisele võetava töö struktuuri. |

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Tartu, **03.05.2022**

1. <https://www.cs.ut.ee/en/studying/guidelines-regulations> [↑](#footnote-ref-1)
2. <https://en.oxforddictionaries.com/definition/term> [↑](#footnote-ref-2)
3. <https://en.oxforddictionaries.com/definition/notation> [↑](#footnote-ref-3)
4. <http://www.keeleveeb.ee/dict/speciality/itstandard/dict.cgi?lang=et&word=metaandmed> [↑](#footnote-ref-4)
5. <http://www.addbalance.com/usersguide/> [↑](#footnote-ref-5)
6. <http://www.oxforddictionaries.com/words/using-capital-letters> [↑](#footnote-ref-6)
7. <http://www.oxforddictionaries.com/us/words/using-capital-letters-american> [↑](#footnote-ref-7)
8. <http://www.eki.ee/books/ekk09/index.php?p=2&p1=7&id=38> [↑](#footnote-ref-8)
9. <http://bibword.codeplex.com/> [↑](#footnote-ref-9)
10. <http://www.keeleveeb.ee/dict/speciality/itstandard/> [↑](#footnote-ref-10)
11. <http://akit.cyber.ee/> [↑](#footnote-ref-11)
12. <http://stats.cyber.ee/> [↑](#footnote-ref-12)
13. <http://www.keeleveeb.ee/dict/speciality/esterm/> [↑](#footnote-ref-13)
14. <http://www.keeleveeb.ee/dict/speciality/enterm/> [↑](#footnote-ref-14)
15. <http://aare.edu.ee/dictionary.html> [↑](#footnote-ref-15)
16. <http://www.keeleveeb.ee/> [↑](#footnote-ref-16)
17. <http://www.oxforddictionaries.com/> [↑](#footnote-ref-17)
18. <http://www.r-project.org/> [↑](#footnote-ref-18)