The title of the thesis goes here

Sub-title of the thesis (leave empty if not required)

Bachelor Thesis

Submitted to
IMC University of Applied Sciences Krems

Bachelor Programme Informatics

by

Elisabeth Musterfrau

for the award of academic degree
Bachelor of Science in Engineering (BSc)

under the supervision of
Dr. Supervisor Musterfrau

Submitted on 19.04.2021

DECLARATION OF HONOUR

I declare on my word of honour that I have written this Bachelor Thesis on my own and that I have not used any sources or resources other than stated and that I have marked those passages and/or ideas that were either verbally or textually extracted from sources. This also applies to drawings, sketches, graphic representations as well as to sources from the internet. The Bachelor Thesis has not been submitted in this or similar form for assessment at any other domestic or foreign post-secondary educational institution and has not been published elsewhere. The present Bachelor Thesis complies with the version submitted electronically.

Elisabeth Musterfrau
19.04.2021

ABSTRACT

Abstract paragraphs should be unindented. Abstract text must fit on a single page. Try to present the essence of your work here.

According to Wikipedia[1], An abstract is a brief summary of a research article, thesis, review, conference proceeding, or any in-depth analysis of a particular subject and is often used to help the reader quickly ascertain the paper's purpose [3]. When used, an abstract always appears at the beginning of a manuscript or typescript, acting as the point-of-entry for any given academic paper or patent application. Abstracting and indexing services for various academic disciplines are aimed at compiling a body of literature for that particular subject.

It is usually not a good practice to include references and footnotes in an abstract. Abstracts must be independent of other works, concise and complete in itself.

It is also possible to write structured abstracts. These are abstracts with distinct, labeled sections (e.g., Introduction, Methods, Results, Discussion), which makes it easier for the reader to navigate easily through the content.

Keywords: Data Analytics, Machine Learning, Useability

[1] https://en.wikipedia.org/

ACKNOWLEDGEMENTS

This is an **optional** page. Use your choice of paragraph style for text on this page. Usually, this space is for thanking your supporters and getting emotional about how grateful you are to everyone.

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Chapter 1
INTRODUCTION

First things first! This is not a LaTeX tutorial! This is a simple template for you to get started with your Bachelor Thesis at IMC University of Applied Sciences, Krems. Use this template together with `imc-inf.cls` file. If you new to LaTeX, here is an excellent starting place for learning the basics: https://www.overleaf.com/learn.

Thesis usually have some levels of chapters and/or sections to keep its contents organized. LaTeX supports this type of organization and also customization of the sectioning and numbering. This template does not define the structure of the chapters. It merely sets the standards for the cover page, fonts, spacings etc, so that we have a homogeneous layout of all bachelor thesis. Start writing or pasting in your text here. By default, only works cited in the text will be added to the bibliography.

1.1 Getting started

Never stop experimenting. Some of the **greatest** discoveries in science were made by ***accident***.

1.1.1 Get LaTeX

LaTeX is free software under the terms of the LaTeX Project Public License (LPPL). LaTeX is distributed through CTAN servers or comes as part of many easily installable and usable TeX distributions provided by the TeX User Group (TUG) or third parties. Visit https://www.latex-project.org/get/ for further details. Recommended TeX distribution for Windows, Linux and macOS is MiKTeX, see https://miktex.org/. MiKTeX's integrated package manager installs missing components from the Internet, if required. This allows you to keep your TeX installation as minimal as possible.

Additionally, it is recommended that you use an editor, that allow users to define formatting of text before hand through markup-level instructions and once the content is inserted, the document is ready to be exported as a PDF or any other file format. The choice is yours, there are many editors available for free. This template was created using TeXstudio. Visit http://texstudio.sourceforge.net/ for further information.

1.1.2 Get latest version of this template

The sources for this template can be found in Github. Make sure you have the latest version: https://github.com/IMC-UAS-Krems/latex-thesis-templates.

1.2 Guidelines in eDesktop

Also consider all the guidelines that are available on the eDesktop: https://edesktop.fh-krems.ac.at/knowledgebase/guidelines/SitePages/Academicregulations.aspx

Chapter 2
EXAMPLE CHAPTER

This is only an example of a chapter! Anyways, all thesis should have a problem statement – not necessarily as a separate chapter though. Only after you know the problem, it will be possible for you to evaluate the results of what you did. If you want to see examples of evaluations, have a look at how graph visualizations are evaluated here [1].

2.1 Code and syntax highlighting

You may sometimes want to add code snippets to your thesis. You can do so by using `lstlisting`. Use this with care, as code should not be extensively presented in the thesis. Here is an example.

```
def addition ():
    print("I am adding numbers here!")
    n = float(input("Enter the number: "))
    t = 0 // Total number enter
    ans = 0
    while n != 0:
        ans = ans + n
        t+=1
        n = float(input("Enter another number (0 to end): "))
    return [ans,t]
```

2.2 Labels and References

See chapter 1 for interesting stuff and see a cool logo in Figure 2.1. If you are still not convinced, try adding a footnote[1]. Its easy to add citations, just use a bibtex file to list your references and cite them here like this [3]. If you want to read a cool paper [2], just contact the author of the paper. Haha, that was funny!

2.3 Mathematical Equations and Expressions

Basic equations in LaTeX can be easily "programmed". Fermat's Last Theorem (sometimes called Fermat's conjecture, especially in older texts) states that no three positive integers a, b, and c satisfy the equation

$$a^n + b^n = c^n$$

for any integer value of n greater than 2. The cases $n = 1$ and $n = 1$ have been known since antiquity to have infinitely many solutions. And because its so much fun, here is an integral for you - thank me later!

$$\int_0^1 x^2 + y^2 \, dx$$

Do you want a more complex formula, I have no idea what it means, but it looks pretty.

$$\oint_{i=1}^{n} \sum_{i=1}^{\infty} \frac{1}{n^s} = \prod_p \frac{1}{1 - p^{-s}}$$

2.4 Enumerations and Descriptions

Here is a simple list:

1. The labels consists of sequential numbers.
2. The numbers starts at 1 with every call to the enumerate environment.

Here is another list:

1. The labels consists of sequential numbers.
    - The individual entries are indicated with a black dot, a so-called bullet.
    - The text in the entries may be of any length.

[1] did you like it?

2. The numbers starts at 1 with every call to the enumerate environment.

Maybe such descriptions are also useful. These look neat to me. What do you think? Oh, I forgot, this document is not a tutorial.

Short This is a shorter item label, and some text that talks about it. The text is wrapped into a paragraph, with successive lines indented.

Rather longer label This is a longer item label. As you can see, the text is not started a specified distance in – unlike with other lists – but is spaced a fixed distance from the end of the label.

2.5 Adding images

Adding a simple image is easy. Adding complex images is also easy. What is a complex image anyway?

Figure 2.1: Old IMC Logo

(a) New Logo since 2023

(b) New IMC Logo since 2023

Figure 2.2: Including sub images!

2.6 Colors

1. IMC Blue

```
\textcolor{imcblue}
```

2. IMC Color for Science and Technology

```
\textcolor{imctech}
```

3. IMC Corporate Color

```
\textcolor{imcgray}
```

4. IMC Corporate Color 2

```
\textcolor{imcorange}
```

2.7 Just a poem by Emily Dickinson

I'm nobody! Who are you?
Are you nobody, too?
Then there's a pair of us — don't tell!
They'd banish us, you know.
How dreary to be somebody!
How public, like a frog
To tell your name the livelong day
To an admiring bog!

2.8 Tables

Country List			
Country Name or Area Name	ISO ALPHA 2 Code	ISO ALPHA 3 Code	ISO numeric Code
Afghanistan	AF	AFG	004
Aland Islands	AX	ALA	248
Albania	AL	ALB	008
Algeria	DZ	DZA	012
American Samoa	AS	ASM	016
Andorra	AD	AND	020
Angola	AO	AGO	024

Table 2.1: Example table

BIBLIOGRAPHY

[1] M. Burch, W. Huang, M. Wakefield, H. C. Purchase, D. Weiskopf, and J. Hua, "The state of the art in empirical user evaluation of graph visualizations," *IEEE Access*, vol. 9, pp. 4173–4198, 2021. [Online]. Available: https://doi.org/10.1109/ACCESS.2020.3047616

[2] D. Dhungana, A. Haselböck, and S. Wallner, "Generation of multi-factory production plans: Enabling collaborative lot-size-one production," in *46th Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2020, Portoroz, Slovenia, August 26-28, 2020*. IEEE, 2020, pp. 529–536. [Online]. Available: https://doi.org/10.1109/SEAA51224.2020.00088

[3] B. Huettner, "The elements of technical writing (2nd ed.) - book review," *IEEE Transactions on Professional Communication*, vol. 45, no. 1, pp. 59–60, 2002.

Appendix A

EXAMPLE APPENDIX 1

Appendices should be used for supplemental information that does not form part of the main research. Remember that figures and tables in appendices should not be listed in the List of Figures or List of Tables.

Appendix B

EXAMPLE APPENDIX 2

Appendices should be used for supplemental information that does not form part of the main research. Remember that figures and tables in appendices should not be listed in the List of Figures or List of Tables.