

# Bachelor's Thesis

## Thesis subject

Course of study	Bachelor of Science in Computer Science
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Project partner	proj partner
Expert	Some expert

Version 1.0 of October 22, 2025

- Technik und Informatik
- Mikro- und Medizintechnik



# Abstract

One-paragraph summary of the entire study – typically no more than 250 words in length (and in many cases it is well shorter than that), the Abstract provides an overview of the study.



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# 1. First Thesis Chapter

## 1.1. Introduction

What is the topic and why is it worth studying? – the first major section of text in the paper, the Introduction commonly describes the topic under investigation, summarizes or discusses relevant prior research (for related details, please see the Writing Literature Reviews section of this website), identifies unresolved issues that the current research will address, and provides an overview of the research that is to be described in greater detail in the sections to follow.

## 1.2. Methods

What did you do? – a section which details how the research was performed. It typically features a description of the participants/subjects that were involved, the study design, the materials that were used, and the study procedure. If there were multiple experiments, then each experiment may require a separate Methods section. A rule of thumb is that the Methods section should be sufficiently detailed for another researcher to duplicate your research.

## 1.3. Results

What did you find? – a section which describes the data that was collected and the results of any statistical tests that were performed. It may also be prefaced by a description of the analysis procedure that was used. If there were multiple experiments, then each experiment may require a separate Results section.





## 2. Second Thesis Chapter

### 2.1. Some L<sup>A</sup>T<sub>E</sub>X Examples

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### 2.1.1. Tabular

Measure	Data	Unit
1	2	3
4	5	6

Stadtteil	Anzahl Personen	Ausländische Bevölkerung
Innere Stadt	3748	17.9 %
Länggasse-Felsenau	17 976	17.1 %
Mattenhof-Weissenbühl	26 895	22.4 %
Kirchenfeld-Schlosshalde	23 384	13.4 %
Breitenrain-Lorraine	24 082	19.4 %

**Table 2.1.:** Anzahl Personen, ausländischer Bevölkerungsanteil und Arbeitslosenquote pro Stadtteil Ende 2005 (Statistikdienste der Stadt Bern, 2006)

**More about Tables** Further information about tables : <https://www.latex-tutorial.com/tutorials/tables/>

**Long Tables** Further information about long tables : <https://www.overleaf.com/learn/latex/tables>

Stadtteil	Anzahl Personen	Ausländische Bevölkerung
Innere Stadt	3748	17.9 %
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Mattenhof-Weissenbühl	26 895	22.4 %
Kirchenfeld-Schlosshalde	23 384	13.4 %
Breitenrain-Lorraine	24 082	19.4 %

**Table 2.2.:** Anzahl Personen, ausländischer Bevölkerungsanteil und Arbeitslosenquote pro Stadtteil Ende 2005 (Statistikdienste der Stadt Bern, 2006)

Stadtteil	Anzahl Personen	Ausländische Bevölkerung
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**Table 2.3.:** Anzahl Personen, ausländischer Bevölkerungsanteil und Arbeitslosenquote pro Stadtteil Ende 2005 (Statistikdienste der Stadt Bern, 2006)

**Table 2.4.:** A sample long table

First column	Second column	Third column
One	abcdef ghijklmn	123.456778
One	abcdef ghijklmn	123.456778
One	abcdef ghijklmn	123.456778
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One	abcdef ghijklmn	123.456778
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One	abcdef ghijklmn	123.456778
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Continued on next page...

[illegible]

5

Table 2.4: ... continued from previous page

First column	Second column	Third column
One	abcdef ghijklmn	123.456778
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One	abcdef ghijklmn	123.456778

### 2.1.2. Math

$$\begin{pmatrix} \dot{x}_1 \\ \dot{x}_2 \\ \dot{x}_3 \end{pmatrix} = \begin{bmatrix} 0 & 1 & 0 \\ 0 & -\frac{b_f}{J} & \frac{K_m}{J} \\ 0 & -\frac{K_g}{L} & \frac{R}{L} \end{bmatrix} \begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix} + \begin{bmatrix} 0 & 0 \\ -\frac{1}{J} & 0 \\ 0 & \frac{1}{L} \end{bmatrix} \begin{pmatrix} t_L \\ v_a \end{pmatrix} \quad (2.1)$$

### 2.1.3. Include pictures



Figure 2.1.: Some meaningful caption



Figure 2.2.: PLACEHOLDER



Figure 2.3.: PLACEHOLDER

### 2.1.4. Code Example

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main( /* int argc, char **argv */ )
5 {
6     printf("Hello,World!\n");
7     return EXIT_SUCCESS;
8 }
```

Listing 2.1: My very first C program.

I developed this very nice application writing "Hello World" to my terminal. The implementation is shown in listing 2.1.

### 2.1.5. Draw boxes

#### Purple

##### Note

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### Blue

##### Note

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### Red

##### Note

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like

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An alert box.



A warning box.



A note box.



A recycle box.

No color set

Some BFH box without color option set. Using default.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language.

There is no need for special content, but the length of words should match the language.

### 2.1.6. Some Item-list

Sometimes you explain this and that using a bullet points. This can be done in  $\text{\LaTeX}$  using an item list in a item environment.

- ▶ My first item
- ▶ The second
- ▶ ...
- ▶ ...

It is also possible to nest such environment and/or enumerate.

- ▶ My first item
  1. My first enumerated item
  2. The second
  3. ...
- ▶ The second
  1. An other enumerated item
  2. ...
  3. ...

### 2.1.7. Multi column environment

Split a part of a document in multiple columns is not so easy with WYSIWYG tools. Whit multicols  $\text{\LaTeX}$  package... well you may know.

- |                 |                 |                 |
|-----------------|-----------------|-----------------|
| ▶ My first item | ▶ My first item | ▶ My first item |
| ▶ The second    | ▶ The second    | ▶ The second    |
| ▶ ...           | ▶ ...           | ▶ ...           |
| ▶ ...           | ▶ ...           | ▶ ...           |

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text



like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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► My first item

► The second

► ...

► ...

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you

read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

- ▶ My first item
  - ▶ The second
- ▶ ...
  - ▶ ...

2.1.8. Use Figures



Figure 2.4.: An example of including a PDF figure.

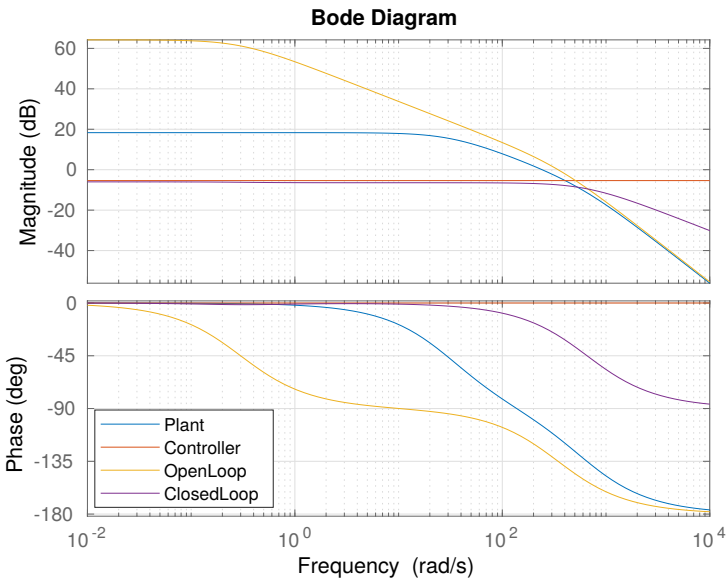
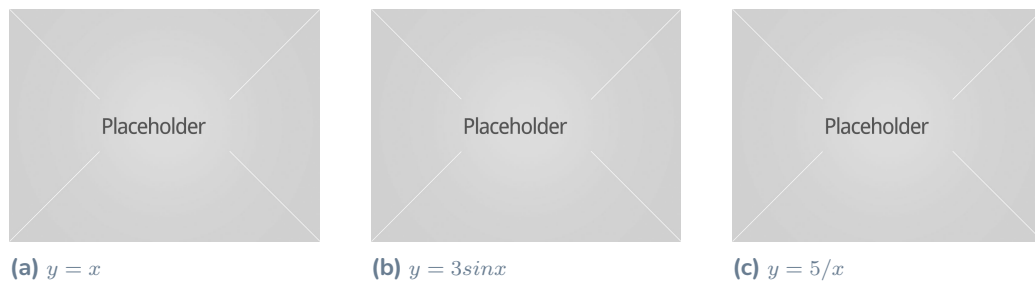


Figure 2.5.: An example of including a PDF figure.

### Use Subfigures

These subfigures requires the package subcaption.



**Figure 2.6.:** Three simple graphs

## 2.2. Example Text With Indices

In this example, several keywords will be used which are important and deserve to appear in the Index.

Terms like generate and some will also show up.

## 2.3. Discussion

What is the significance of your results? – the final major section of text in the paper. The Discussion commonly features a summary of the results that were obtained in the study, describes how those results address the topic under investigation and/or the issues that the research was designed to address, and may expand upon the implications of those findings. Limitations and directions for future research are also commonly addressed.

## Declaration of Authorship

I hereby declare that I have written this thesis independently and have not used any sources or aids other than those acknowledged.

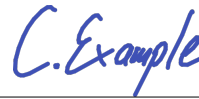
All statements taken from other writings, either literally or in essence, have been marked as such.

I hereby agree that the present work may be reviewed in electronic form using appropriate software.

October 22, 2025



A. Muster



C. Example



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## Glossary

This document is incomplete. The external file associated with the glossary ‘main’ (which should be called `main.gls`) hasn’t been created.

Check the contents of the file `main.gls`. If it’s empty, that means you haven’t indexed any of your entries in this glossary (using commands like `\gls` or `\glsadd`) so this list can’t be generated. If the file isn’t empty, the document build process hasn’t been completed.

If you don’t want this glossary, add `nomain` to your package option list when you load `glossaries-extra.sty`. For example:

```
\usepackage[nomain]{glossaries-extra}
```

Try one of the following:

- ▶ Add `automake` to your package option list when you load `glossaries-extra.sty`. For example:

```
\usepackage[automake]{glossaries-extra}
```

- ▶ Run the external (Lua) application:

```
makeglossaries-lite.lua "main"
```

- ▶ Run the external (Perl) application:

```
makeglossaries "main"
```

Then rerun  $\text{\LaTeX}$  on this document.

This message will be removed once the problem has been fixed.



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## A. First Appendix Chapter