



Thesis Title

Thesis Type (e.g., Bachelor/Master thesis/project)

Faculty (e.g., Natural Science Faculty of the University of Basel)
Department (e.g., Department of Mathematics and Computer Science)
Research Group
Webpage

Examiner: Examiner (e.g., Prof. Dr. Alan Turing)
Supervisor: Supervisor (e.g., Advisor, MSc.)

Author(s)
E-Mail
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Hand-In-Date

Abstract

This thesis discusses the thesis template using some examples of the Turing Machine.

Table of Contents

Abstract	ii
1 Introduction	1
2 Body of the Thesis	2
2.1 Structure	2
2.1.1 Sub-Section	2
2.1.1.1 Sub-Sub-Section	2
2.2 Equations	2
2.3 Tables	2
2.4 Figures	3
2.5 Packages	3
3 Conclusion	4
Bibliography	5
Appendix A Appendix	6
Declaration on Scientific Integrity	7

1

Introduction

This is the introduction to the thesis template. The goal is to give students a starting point on how to format and style their Bachelor or Master thesis¹.

Please make sure to always use the most current version of this template, by downloading it always from the original git repository:

<http://www.github.com/ivangiangreco/unibas-latex>

We will use throughout this tutorial some references to Turing's imitation game [2] and the Turing machine [1]. You may be interested in reading these papers.

The package comes with an option regarding the bibliography style. You can include the package with

```
\usepackage[citeauthor]{basilea}
```

to be able to cite authors directly with

```
\citet{turing:1950}
```

If the option is enabled, then the following reference should print Turing [2]: Turing [2]

¹ This document also shows how to use the template.

2

Body of the Thesis

This is the body of the thesis.

2.1 Structure

2.1.1 Sub-Section

2.1.1.1 Sub-Sub-Section

Paragraph

Even Sub-Paragraph This is the body text. Make sure that when you reference anything you use labels and references. When you refer to anything, you normally capitalise the type of object you reference to, e.g. Section 2.1 instead of section 2.1. You may also just use the `cref` command and it will generate the label, e.g., for Section 2.1, we did not specify the word “Section”.

Hint: Try to structure your labels as it is done with `sec:my-label` and `fig:machine`, etc.

2.2 Equations

A Turing Machine is a 7-Tuple:

$$M = \langle Q, \Gamma, b, \Sigma, \delta, q_0, F \rangle \quad (2.1)$$

A Turing Machine is a 7-Tuple even if defined in the text, as in $M = \langle Q, \Gamma, b, \Sigma, \delta, q_0, F \rangle$.

2.3 Tables

Some tables can also be used as shown in Table 2.1². Remember that tables might be positioned elsewhere in the document. You can force positioning by putting a `ht!` in the definition.

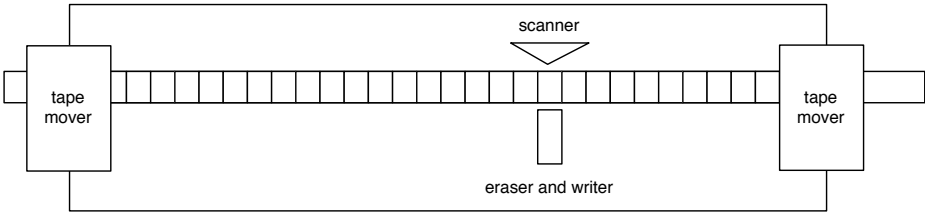
² Table captions are normally above the table.

Table 2.1: Frequency of Paper Citations. By the way: Make sure to put the label always after the caption, otherwise \LaTeX might reference wrongly!

Title	f	Comments
The chemical basis of morphogenesis	7327	
On computable numbers, with an application to the ...	6347	Turing Machine
Computing machinery and intelligence	6130	

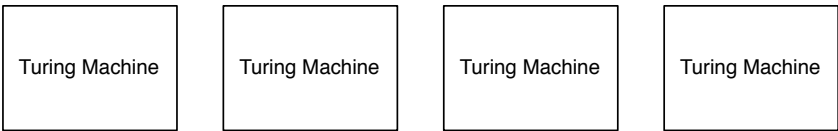
2.4 Figures

Figures are nice to show concepts visually. For organising well your thesis, put all figures in the Figures folder. Figure 2.1 shows how to insert an image into your document. Figure 2.2 references a figure with multiple sub-figures, whereas the sub-figures are referenced by Fig. 2.2(a), etc.



Missing: Description figure.

Figure 2.1: A Turing machine.



(a) Turing Machine 1 (b) Turing Machine 2 (c) Turing Machine 3 (d) Turing Machine 4

Figure 2.2: Plots of four Turing machines

2.5 Packages

These packages might be helpful for writing your thesis:

- caption** to adjust the look of your captions
- glossaries** for creating glossaries (also list of symbols)
- makeidx** for indexes and the back of your document
- algorithm**, **algorithmicx**, **algpseudocode** for adding algorithms to your document

3

Conclusion

This is a short conclusion on the thesis template documentation. If you have any comments or suggestions for improving the template, if you find any bugs or problems, please contact me.

Good luck with your thesis!

Bibliography

- [1] Alan M Turing. On computable numbers, with an application to the entscheidungsproblem. *Proceedings of the London mathematical society*, 42(2):230–265, 1936.
- [2] Alan M Turing. Computing machinery and intelligence. *Mind*, 59(236):433–460, 1950.



Appendix

Declaration on Scientific Integrity

Erklärung zur wissenschaftlichen Redlichkeit

includes Declaration on Plagiarism and Fraud
beinhaltet Erklärung zu Plagiat und Betrug

Author — Autor

Author(s)

Matriculation number — Matrikelnummer

0000-000-000

Title of work — Titel der Arbeit

Thesis Title

Type of work — Typ der Arbeit

Thesis Type (e.g., Bachelor/Master thesis/project)

Declaration — Erklärung

I hereby declare that this submission is my own work and that I have fully acknowledged the assistance received in completing this work and that it contains no material that has not been formally acknowledged. I have mentioned all source materials used and have cited these in accordance with recognised scientific rules.

Hiermit erkläre ich, dass mir bei der Abfassung dieser Arbeit nur die darin angegebene Hilfe zuteil wurde und dass ich sie nur mit den in der Arbeit angegebenen Hilfsmitteln verfasst habe. Ich habe sämtliche verwendeten Quellen erwähnt und gemäss anerkannten wissenschaftlichen Regeln zitiert.

Basel, Hand-In-Date

Signature — Unterschrift