

# Example Masters Thesis. With a long title to test the wrapping of the box

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Master's Thesis

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## **Preface**

Here, you give a brief introduction to your work. What it is (e.g., a Master's thesis in AIMT at NTNU, when it was carried out (e.g., during the autumn semester of 2021). If the project has been carried out with a company, you should mention this and also describe the cooperation with the company. You may also describe how the idea to the project was brought up.

You should also specify the assumed background of the readers of this report (who are you writing for).

31-05-2016



## Acknowledgment

I would like to thank the following persons for their great help during ...

If the project has been carried out in cooperation with an external partner (e.g., a company), you should acknowledge the contribution and give thanks to the involved persons.

You should also acknowledge the contributions made by your supervisor(s).

O.N.

(Your initials)



## **Abstract**

This is a summary of the thesis including the conclusion of what was discovered.





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# 1 Introduction

These detailed typographical rules have been implemented in the `ntnuthesis`  $\text{\LaTeX}$  document class.

The purpose of this document is to provide an example and description on how this class file can be used.

This was then extended to include bachelor project by Simon McCallum. The package has changed names and version number it is now called `ntnuthesis v2` as of 2016/31/03.





## 2 Packages

The `ntnuthesis` is built upon the standard  $\text{\LaTeX}$  `report` class. All commands from the `report` class can be used, with the two exceptions of `\subsubsection` and `\paragraph`. This is because there should only be three levels of headings according to the guidelines [1]. It has been placed in a folder called `ntnuthesis` so that it does not clutter your work. You should not change anything in `ntnuthesis`

### 2.1 Packages Used by `ntnuthesis`

In addition to the `report` document class, `ntnuthesis` makes direct use of the following packages that must hence be present:

**geometry:** used for setting the sizes of the margins and headers.

**fontenc:** used with option `T1` for forcing the Cork font encoding (necessary for the Charter font).

**charter:** load Charter as the default font.

**euler:** load the Euler math fonts.

**bable:** for language handling.

### 2.2 Other Relevant Packages

The author of a thesis might want to use a bunch of different packages to those described in Section 2.1 in order to have all features needed for their document. In particular, it is advised to use the following:

**inputenc:** to allow  $\text{\LaTeX}$  to use more than 7-bit ASCII for its input. Most often, the option `latin1` will do.

**babel:** to load language specific strings. Reasonable options include `british`, `american`, `norsk` and `nynorsk`.

**graphicx:** to include graphics.

**hyperref:** this is a very nice package that makes cross links in pdf documents. Use with option `dvips` or `pdftex` in accordance with the driver that you use. Unfortunately, `hyperref` is not completely bugfree...

We have web pages as well [\[2\]](#), and now games like Halo [\[3\]](#).

## 3 Structural Elements

The title of the thesis should be set using the `\thesistitle` command, and the date of the thesis should be set using the `\thesisdate` command. This makes the title and date appear in the running header, like in this document.

### 3.1 Page Layout

The geometry of the page has been set using the `\geometry` command.

### 3.2 Fonts

Due to limited  $\text{\LaTeX}$  support for the Georgia font, Charter has been chosen instead. For mathematical formula, the Euler fonts are used, since they blend more nicely with the Charter than the standard  $\text{\LaTeX}$  fonts:

$$f(x) = \int_0^x g(\tau) \, d\tau$$

For inline math you can use `\(` and `\)` for example  $f(x) = \frac{x^2}{1+x^2}$ . This also allows you to use `/` and `\.` You need to include the `{}` when you want the special character to have other letters immediately after it.

### 3.3 Sectioning Commands

The standard  $\text{\LaTeX}$  sectioning commands are used for both numbered and unnumbered sections. The top level is given by the `\chapter` command. This starts a new right page. The two lower levels are obtained using the `\section` and `\subsection` commands. The standard  $\text{\LaTeX}$  `\subsubsection` and `\paragraph` commands have been disabled since their use is not encouraged by the thesis guidelines.



Figure 1: An example figure. If the caption is shorter than one line, it is centered. If it goes over more than one line, it is left and right justified. Furthermore, it is suggested that an alternative short caption is given in order to produce a good list of figures.

When you use these they will not be given numbers. They still appear in the document with highlighting but not in the table of contents.

### 3.3.1 The subsection

This is an example of a subsection.

#### The subsubsection

This is an example of a subsubsection.

#### *The paragraph*

This is an example of a paragraph with a heading.

## 3.4 Floats (Figures and Tables)

Figures are placed in the `figure` environment. An example is shown in Figure 1. Tables are placed in the `table` environment. An example is given in Table 1. Figures and tables float freely around in the document in accordance with standard  $\text{\LaTeX}$  behavior.

The captions are placed *below* both for the figures and the tables. The caption is set in 9pt. If the caption is shorter than one line, it is centered.

Age	IQ
10	100
20	100
30	150
40	100
50	100

Table 1: An example table.

### 3.5 Quotes

Quotes are inserted using the standard  $\text{\LaTeX}$  `quote` environment. The environment has been changed so that a 9pt font is used:

“And I looked, and, behold, a whirlwind came out of the north, a great cloud, and a fire infolding itself, and a brightness was about it, and out of the midst thereof as the colour of amber, out of the midst of the fire. Also out of the midst thereof came the likeness of four living creatures.”

### 3.6 Lists

Point lists and enumerated lists are made by using the standard `itemize` and `enumerate` environments, respectively. The spacing is going to be changed in accordance with the specification. For `itemize`, the results look like this:

- First item.
- Second item. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate.
- Third item also has subitems:
  - First subitem.
  - Second subitem.
  - Third subitem.

and for `enumerate` like this:

1. First item.

2. Second item. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate.
3. Third item also has subitems:
  1. First subitem.
  2. Second subitem.
  3. Third subitem.

You may also want to use descriptive lists

**First** the first item.

**Second** the second item. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate. Here I will put some long text, just to illustrate.

**What now** the third item also has subitems:

1. First subitem.
2. Second subitem.
3. Third subitem.

### 3.7 Bibliographic References

You should cite articles [4], books [5], anthologies [6] and web publications [7] like this. There is always an issue referencing web pages. Currently we suggest that you use the HiG Website [8].

A particular bibliography style file for NTNU named `ntnuthesis.bst` has been developed based upon the standard Bib<sub>T</sub><sub>E</sub>X `unsrt` style.

## Bibliography

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