

# TUDa Thesis With Typst

## Title German

Master thesis by Albert Author

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1. Review: SuperSupervisor 1

2. Review: SuperSupervisor 2

Darmstadt



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

field of study:  
Some Field of Study

Institute ABC



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# Abstract

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This is a template to write your thesis with the corporate design of TU Darmstadt. For instructions of how to setup this template see Section 2.

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# 1 Demo of the Template Style

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This chapter contains lots of demo content to see how the template looks. For usage instructions go to to Section 2.

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## 1.1 Demo Paragraphs

---

Here is some demo text. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aequaeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aequaeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguere possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facere et urbane Stoicos irridere, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet, ut et.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aequaeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguere possit, augeri amplificarique non possit. At.

---

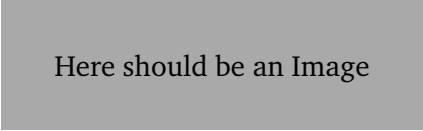
## 1.2 Some Basic Elements

---

This text contains two<sup>1</sup> footnotes<sup>2</sup>.

### 1.2.1 Figures

The following Figure 1 represents a demo Figure.



Here should be an Image

Figure 1.1: The figure caption.

We can also make tables, as in Table 1.

A	B
1	2

Table 1.1: This is the table title.

The text continues normally after the Figures.

---

<sup>1</sup>The number two can also be written as 2.

<sup>2</sup>This is a first footnote.  
It has a second line.

---

## 1.3 Test Coding

---

Let's autogenerate some stuff:

- Element Nr. 0 has value 0



- Element Nr. 1 has value 2



- Element Nr. 2 has value 4



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## 1.4 Lists

---

This is a list:

1. an item
2. another item

This is another list

- an item
- another item
- yet another item

---

## 1.5 Let's do some math

---

Bla *blub* **bold**. Math:  $x + y^{\frac{a+b}{2}}$ .

Align:

$$\begin{aligned} x + y^2 &\neq 27 \sum_{n=0}^N e^{i \cdot \pi \cdot n} \\ \text{s.t.} \quad &bc \\ \begin{pmatrix} 1 & 3 \\ 3 & 4 \end{pmatrix}^T &= \alpha \begin{pmatrix} x & y \\ x_2 & y_2 \end{pmatrix}^T \end{aligned} \tag{1.2}$$

$$\underbrace{\mathcal{B} \geq B}_{\text{This is fancy!}}$$

$$x = y^2 + 12 \text{ (This does A)} \tag{1.4}$$

$$y = z/2 = \frac{z}{2} \text{ (This does B)} \tag{1.6}$$

In Equation 5 we can see cool stuff.

### 1.5.1 Math in Latex

This is possible with the package `mitex`: You can include the package at the beginning of your document via `#import "@preview/mitex:0.1.0": *`. Usage:

<pre>mitex(` \begin{pmatrix} \dot{r}_x + \omega r_x - \omega p_x \ \ \ \dot{r}_x - \omega r_x + \omega p_x \end{pmatrix} = \begin{pmatrix} +\omega \xi_x - \omega p_x \ \ -\omega s_x + \omega p_x \end{pmatrix} `)</pre>	$\begin{pmatrix} \dot{r}_x + \omega r_x - \omega p_x \\ \dot{r}_x - \omega r_x + \omega p_x \end{pmatrix} = \begin{pmatrix} +\omega \xi_x - \omega p_x \\ -\omega s_x + \omega p_x \end{pmatrix} \begin{pmatrix} 1 \\ 8 \end{pmatrix}$
---	--

---

### 1.5.2 Ajust Equation spacing

To reduce the spacing above and below block equations use:

```
#show math.equation: set block(spacing: 0.1em) // does not work!
```

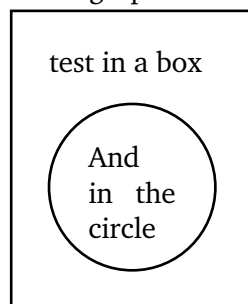
With default spacing	With reduced spacing
This is Text. $x^2 = y^2$ (1.10) This is Text.	This is Text. $x^2 = y^2$ (1.12) This is Text.

---

## 1.6 Another Section

---

Some graphics:



Some more text here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat. In Figure 2 we can see things.



Figure 1.2: This is a figure

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aequaleamus animo,



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cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguique possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facete et urbane Stoicos irridente, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et.

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## 2 Usage of this Template

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To use the template write the following in your `main.typ` file (also see the `README.md` of the repository for more details):

```
#import "templates/tuda-typst-templates/templates/tudapub/tudapub.typ": tudapub

#show: tudapub.with(
  title: [
    My Thesis
  ],
  author: "My Name",
  accentcolor: "3d"
)

= My First Chapter
Some Text
```

For the list of possible accent colors to select from see Section 2.2.

---

### 2.1 Template Options

---

In the following, we show the `show`-command of this template with all doc and default options. Note that this may not be up to date, thus allways also look at the file `templates/tudapub/tudapub.typ`.

```
#show: tudapub.with(
  title: [Title],
  title_german: [Title German],

  // Adds an abstract page after the title page with the corresponding content.
  // E.g. abstract: [My abstract text...]
  abstract: none,
```

---

```
// "master" or "bachelor" thesis
thesis_type: "master",

// The code of the accentcolor.
// A list of all available accentcolors is in the list tuda_colors
accentcolor: "9c",

// Size of the main text font
fontsize: 10.905pt, //11pt,

// Currently just a4 is supported
paper: "a4",

// Author name as text, e.g "Albert Author"
author: "An Author",

// Date of submission as string
date_of_submission: datetime(
    year: 2023,
    month: 10,
    day: 4,
),

location: "Darmstadt",

// array of the names of the reviewers
reviewer_names: ("SuperSupervisor 1", "SuperSupervisor 2"),

// language for correct hyphenation
language: "eng",

// Set the margins of the content pages.
// The title page is not affected by this.
margin: (
    top: 30mm, //35.25mm + 0.05mm, //+ 0.02mm,
    left: 31.5mm,
    right: 31.5mm,
    bottom: 56mm
),

// path to the tuda logo containing the file name, has to be a svg.
logo_tuda_path: "logos/tuda_logo.svg",

// path to an optional sub-logo of an institute containing the file name, has
```

---

---

```

to be a svg or picture.
// E.g. "logos/iasLogo.jpeg"
logo_institue_path: none,

// How to set the size of the optional sub-logo
// either "width": use tud_logo_width*(2/3)
// or      "height": use tud_logo_height*(2/3)
logo_institue_sizeing_type: "width",

// Move the optinal sub-logo horizontally
logo_institue_offset_right: 0mm,

// An additional white box with content e.g. the institute, ... below the tud
logo.
// Disable it by setting its value to none.
// E.g. logo_sub_content_text: [ Institute A \ filed of study: \ B]
logo_sub_content_text: [
    field of study: \
    Some Field of Study \
    \
    Institute A
],

// Which pages to insert
// Pages can be disabled individually.
show_pages: (
    title_page: true,
    outline_table_of_contents: true
),

// Insert additional pages directly after the title page.
// E.g. additional_pages_after_title_page: [
//     = Notes
//     #pagebreak()
//     = Another Page
// ]
additional_pages_after_title_page: none,

// Insert additional pages directly after the title page.
// E.g. additional_pages_after_title_page: [
//     = Notes
//     #pagebreak()

```

---

---

```

//   = Another Page
// ]
additional_pages_before_outline_table_of_contents: none,

// Insert additional pages directly after the title page.
// E.g. additional_pages_after_title_page: [
//   = Notes
//   #pagebreak()
//   = Another Page
// ]
additional_pages_after_outline_table_of_contents: none,


// For headings with a height level than this number no number will be shown.
// The heading with the lowest level has level 1.
// Note that the numbers of the first two levels will always be shown.
heading_numbering_max_level: 3,


// Set space above the heading to zero if it's the first element on a page.
// This is currently implemented as a hack (check the y pos of the heading).
// Thus when you experience compilation problems (slow, no convergence) set this
to false.
reduce_heading_space_when_first_on_page: true,


// How the table of contents outline is displayed.
// Either "adapted": use the default typst outline and adapt the style
// or "rewritten": use own custom outline implementation which better
reproduces the look of the original latex template.
// Note that this may be less stable than "adapted", thus
when you notice visual problems with the outline switch to "adapted".
outline_table_of_contents_style: "rewritten",


// Use own rewritten footnote display implementation.
// This may be less stable than the built-in footnote display impl.
// Thus when having problems with the rendering of footnote disable this option.
footnote_rewritten_fix_alignment: true,


// When footnote_rewritten_fix_alignment is true, add a hanging intent to
multiline footnotes.
footnote_rewritten_fix_alignment_hanging_indent: true,


// Use 'Roboto Slab' instead of 'Robot' font for figure captions.
figure_caption_font_roboto_slab: true,

```

---

---

```

// Figures have the numbering <chapter-nr>.<figure-nr>
figure_numbering_per_chapter: true,

// Equations have the numbering <chapter-nr>.<equation-nr>
// @todo This seems to increase the equation number in steps of 2 instead of one
equation_numbering_per_chapter: true
)

```

---

## 2.2 TUDa Accent Color List

---

The list of colors which can be use in the template argument accentcolor:

0d	0c	0b
0a	1a	2a
3a	4a	5a
6a	7a	8a
9a	10a	11a
1b	2b	3b
4b	5b	6b
7b	8b	9b
10b	11b	1c
2c	3c	4c
5c	6c	7c
8c	9c	10c



---

11c	1d	2d
3d	4d	5d
6d	7d	8d
9d	10d	11d

---

## 3 Glossary

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**KDE Community:** An international team developing and distributing Open Source software.

**KU Leuven.**

**OIDC – OpenID Connect:** OpenID is an open standard and decentralized authentication protocol promoted by the non-profit OpenID Foundation.

**UNamur – Université de Namur.**