# **Vienna-Tech - Template Documentation**

v.0.2.0

# **Example Usage**

```
#import "@preview/vienna-tech:0.2.0": *
                                                                           Typst
2
3 // Useing the configuration
4 #show: tuw-thesis.with(
     header-title: "Instruktionen zur Abfassung der Bachelorarbeit",
5
6)
7 #maketitle(
     title: [Instruktionen zur Abfassung der Bachelorarbeit],
     thesis-type: [Bachelorarbeit],
10
     authors: (
11
     (
12
         name:"Vorname Nachname",
13
         email: "email@email.com",
         matrnr: "12345678",
14
15
      ),
16
     ),
17 )
```

# **Styles of the Template**

The following styles or functions can be used to set the formatting of the document.

- appendix()
- tuw-thesis()

### appendix

Function to format the Appendix

#### **Parameters**

```
appendix(
  numbering: none str function,
  title: none str content,
  title-align: alignment,
  title-size: length,
  title-ouline: bool,
  numbering-start: int,
  outline-exclude: array,
  content
) -> content
```

numbering none or str or function

The numbering of the Appendix

Default: "A.1"

title none or str or content

The title of the Appendix

Default: none

title-align alignment

The alignment of the title

Default: center

title-size length

The size of the title

Default: none

title-ouline bool

Wheter the title should be outlined

Default: false

numbering-start int

Starting the appendix after this number

Default: 0

outline-exclude array

Exclude these heading levels from beeing outlined.

Default: (2,3)

### tuw-thesis

Thesis Template for Civil- und Environmentalengineers at TU Wien. This function gets your whole document as its body and formats it according to the TU Wien guidelines for theses.

```
Parameters
```

```
tuw-thesis(
  heading-numbering: string content func,
  eq-numbering: string func,
  eq-chapterwise: bool,
  header-title: string content,
  header-start: integer,
  header-style: element,
  papersize: string,
  lang: string,
  font-size: length,
  main-font: string array,
  title-font: string array,
  raw-font: string array,
  paper-margins: dictionary lenght,
  fig-caption-width,
  title-hypenation,
  body
)
heading-numbering
                     string or content or func
The numbering of the headings
Default: "1.1"
eq-numbering
                string or func
The numbering style of equations
Default: "(1.1)"
                  bool
eq-chapterwise
Restart the equation counter after every level 1 chapter
Default: false
header-title
              string or content
The Titel or Text which should be displayed in the header.
Default: none
header-start
               integer
The starting page of the header.
Default: 1
```

```
header-style element
```

The style of the header (emph, strong, smallcaps, ...)

Default: emph

### papersize string

The thesis papersize. Affects margins.

Default: "a4"

### lang string

The language of the document.

Default: "de"

#### font-size length

The standard fontsize. All other fontsizes are in calculated from this value.

Default: 11pt

# main-font string or array

The font of the whole document.

Default: "New Computer Modern"

# title-font string or array

The font of the headings (of Sans Type)

Default: ("New Computer Modern Sans", "PT Sans", "DejaVu Sans")

### raw-font string or array

The font of the raw text or codeblocks.

Default: ("DejaVu Sans Mono")

# paper-margins dictionary or lenght

The margins of the paper

Default: (left: 2.5cm, right: 2.5cm, top: 2.5cm, bottom: 2.5cm)

# **Constructors of the Template**

These constructors construct certain parts of the thesis.

- abstract()
- maketitle()

#### abstract

This function constructs the abstract, which is supposed to come directly after the frontmatter.

#### **Parameters**

```
abstract(
  content,
  font: string,
  title: content string
) -> content

font string

The font, which is only used for the heading of the abstract paragraph.
```

```
Default: title-font
```

```
title content or string

The title which the abstract paragraph should have.

Default: [Kurzfassung]
```

#### maketitle

This function constructs the the frontmatter of the thesis.

#### **Parameters**

```
maketitle(
  title: content string,
  thesis-type: content string,
  authors: array,
  date: content string,
  date-prefix: content string,
  fields: array,
  field-prefixes: array,
  metadata: bool,
  title-font: string,
  large-size: length,
  font-size: length,
  title-hypenation: auto bool
) -> content
```

#### title content or string

The Thesis Title is set here.

Default: []

### thesis-type content or string

The type of thesis. Bachelor-, Masters- or another kind of thesis.

Default: none

#### authors array

An array of authors. For each author, you can specify a name, matriculation number, email. The attributes can be modified via the fields and field-prefixes arguments.

Default: none

#### date content or string

Displays the date if it is not none.

Default: datetime.today().display("[day] [month repr:long] [year]")

### date-prefix content or string

Sets the prefix that is shown before the date.

Default: "Datum:"

#### fields array

Defines the fields/keys, that the authors need to have.

Default: ("email", "matrnr")

# field-prefixes array

Sets the prefixes, that are shown before their actual value, which is taken from the authors dictionary.

Default: ("", "Matr.Nr.: ")

#### metadata bool

If true writes the title and the first authors name to the pdfs metadata.

Default: true

# title-font string

Set the font of the title.

Default: title-font

### large-size length

Size of the heading

Default: large-size

### font-size length

Size of the authors text.

Default: normal-size

# title-hypenation auto or bool

Sets the hyphenation of the title. Is ideal for long titles.

Default: auto

# **Utilitys of the Template**

A couple of global variables and function used throughout the document.

#### Variables:

- main-font
- title-font
- raw-font
- normal-size
- footnote-size
- small-size
- large-size
- fancy-typst
- fancy-latex

#### main-font array

The main font, which is used through out the document.

# title-font array

The fonts, which are used for the headings (Sans type fonts).

### raw-font array

The font used for all raw and code text elements

normal-size length

The size of the text. All other Textsizes are relative to this lenght.

footnote-size length

The size of footnotes

small-size length

The size of small text.

large-size length

The size of headings.

fancy-typst content

Fancy Representation for LaTeX

fancy-latex content

Fancy Representation for Typst