Vienna-Tech - Template Documentation

v.1.0.0

Example Usage

```
1   #import "@preview/vienna-tech:1.0.0": *                      t Typst
2
3   // Useing the configuration
4   #show: tuw-thesis.with(
5     header-title: "Instruktionen zur Abfassung der Bachelorarbeit",
6   )
7   #maketitle(
8     title: [Instruktionen zur Abfassung der Bachelorarbeit],
9     thesis-type: [Bachelorarbeit],
10    authors: (
11      (
12        name:"Vorname Nachname",
13        email: "email@email.com",
14        matrnr: "12345678",
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)"`

eq-chapterwise   bool

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