

elegant-polimi-thesis documentation

This chapter is the result of the documentation generated from the source code. Since it's not strictly needed to use the template – most of the functions are straightforward – it's quite barebones.

This document contains them all, even those that are not exposed to the user, which are marked with “`_`” before.

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User designated functions

polimi-thesis

The main thesis formatting function.

Parameters

```
polimi-thesis(  
    title: str,  
    author: str,  
    advisor: str,  
    coadvisor: str arr,  
    academic-year: str,  
    tutor: str,  
    cycle: str,  
    chair: str,  
    student-id: str,  
    course: str,  
    logo: path,  
    frontispiece: "phd" "deib-phd" "cs-eng-master" "classical-master",  
    body  
) -> content
```

title str

Title of the thesis.

Default: "Thesis Title"

author str

Author of the thesis.

Default: "Name Surname"

advisor str

Advisor of the thesis.

Default: "Advisor"

coadvisor str or arr

Coadvisor(s) of the thesis.

Default: "Coadvisor"

academic-year str

Academic year of the thesis. If empty, defaults to "2025-2026".

Default: ""

tutor str

Tutor of the thesis.

Default: "Tutor"

cycle str

Cycle of the thesis.

Default: "XXV"

chair str

Chair of the thesis.

Default: "Chair"

student-id str

Student ID.

Default: "00000000"

course str

Student course.

Default: "Course Engineering"

logo path

Path of the main logo of the thesis (default: "Scuola di Ingegneria Industriale e dell'Informazione").

Default: "img/logo_ingeieria.svg"

frontispiece "phd" or "deib-phd" or "cs-eng-master" or "classical-master"

Frontispiece of the thesis. Can be either: phd, deib-phd, cs-eng-master or classical-master.

Default: "phd"

polimi-article-format-thesis

The thesis article format styling function.

Parameters

```
polimi-article-format-thesis(  
    title: str,  
    author: str,  
    advisor: str,  
    coadvisor: str array,  
    academic-year: str,  
    student-id: str,  
    course: str,  
    abstract: content,  
    keywords: str,  
    logo: path,  
    body  
) -> content
```

title str

Title of the thesis.

Default: "Thesis Title"

author str

Author of the thesis.

Default: "Name Surname"

advisor str

Advisor of the thesis.

Default: "Prof. Name Surname"

coadvisor str or array

Coadvisor(s) of the thesis.

Default: "Prof. Name Surname"

academic-year str

Academic year of the thesis. If empty, defaults to "2025-2026".

Default: ""

student-id str

Student ID.

Default: "00000000"

course str

Student course.

Default: "XXXXXXXXXX Engineering - Ingegneria XXXXXXXXXXXX"

abstract content

Abstract.

Default: []

keywords str

Keywords, that appear below the abstract (and in the PDF metadata).

Default: "word, word, word"

logo `path`

Logo of the thesis.

Default: `"img/logo_ingegneria.svg"`

polimi-executive-summary

The executive summary styling function.

Parameters

```
polimi-executive-summary(  
    title: str,  
    author: str,  
    advisor: str,  
    coadvisor: str array,  
    academic-year: str,  
    course: str,  
    logo: path,  
    body  
) -> content
```

title `str`

Title of the thesis.

Default: `"Thesis Title"`

author `str`

Author of the thesis.

Default: `"Name Surname"`

advisor `str`

Advisor of the thesis.

Default: `"Prof. Name Surname"`

coadvisor `str or array`

Coadvisor(s) of the thesis.

Default: `"Prof. Name Surname"`

academic-year `str`

Academic year of the thesis. If empty, defaults to “2025-2026”.

Default: `""`

course `str`

Student course.

Default: `"XXXXXXXXXX Engineering - Ingegneria XXXXXXXXXXXX"`

logo `path`

Logo of the thesis.

Default: `"img/logo_ingegneria.svg"`

_blank-toc

Helper function to manually add blank space above an outline entry (similar to L^AT_EX’s `\addtocontents{toc}{\vspace{1em}}`).

Parameters

`_blank-toc(space: length) -> content`

space `length`

Vertical space to add before the next outline entry.

Default: `1em`

frontmatter

Frontmatter section. Similar to L^AT_EX’s `\frontmatter`, it is meant to be only used in the thesis. It sets the page numbering to “i” and numbering: `none` for headings.

Parameters

`frontmatter(body) -> content`

acknowledgements

Acknowledgements section. It sets numbering: `none` for headings.

Parameters

`acknowledgements(body) -> content`

mainmatter

Mainmatter section. Similar to L^AT_EX's `\mainmatter`, it is meant to be only used in the thesis. It sets to page numbering to "1", heading numbering to "1.1" + `h()` and resets the page counter.

Parameters

```
mainmatter(body) -> content
```

appendix

Appendix section. Similar to L^AT_EX's `\appendix`. It sets heading numbering to "A.1" and resets their counter.

Parameters

```
appendix(body) -> content
```

backmatter

Backmatter section. Similar to L^AT_EX's `\backmatter`, it is meant to be only used in the thesis. It sets heading numbering to `none`.

Parameters

```
backmatter(body) -> content
```

_lists

Lists figure to make the list of tables, list of figures to appear in the table of contents.

Parameters

```
_lists() -> content
```

_lists-entries-style

Internal helper function to create the custom lists of figures and table.

Parameters

```
_lists-entries-style(
  outline-entry: outline-entry ,
  kind: function
) -> content
```

```
outline-entry outline-entry
```

Outline entry to edit.

kind function

The kind of the outline entry element (image or table)

nomenclature

Displays a simple nomenclature with keys and values.

```
#nomenclature((  
    "Polimi": "Politecnico di Milano",  
    "CdL": "Corso di Laurea",  
    "CCS": "Consigli di Corsi di Studio",  
    "CFU": "Crediti Formativi  
Universitari",  
) )
```

Nomenclature

POLIMI	Politecnico di Milano
CdL	Corso di Laurea
CCS	Consigli di Corsi di Studio
CFU	Crediti Formativi Universitari

Parameters

```
nomenclature(  
    dict: dictionary,  
    indented: bool  
) -> content
```

dict dictionary

Dictionary that hold keys and values.

indented bool

Whether to indent or not the nomenclature.

Default: true

theorems-init

Utility function to initialize the theorem environments¹:

- theorem
- proposition
- lemma
- remark

Parameters

```
theorems-init(body) -> content
```

¹Provided by great-theorems package.

subfigure

Creates a new subfigure with the given arguments and an optional label. From `hallon` package.

Parameters

```
subfigure(  
    ..args,  
    outlined: bool,  
    label: str,  
    body  
) -> content
```

outlined `bool`

Whether to outline this subfigure or not.

Default: `false`

label `str`

Unique label to reference this subfigure

Default: `none`

toc `content`

Custom-built `outline()`.

list-of-figures `content`

List of figures. Similar to `LATEX`'s `\listoffigures`.

list-of-tables `content`

List of tables. Similar to `LATEX`'s `\listoftables`.

theorem `content`

Theorem block.

proposition `content`

Proposition block.

lemma `content`

Lemma block.

remark `content`

Remark block.

proof `content`

Proof block.

Utilities

_is-page-empty

Check if a page is empty.

Parameters`_is-page-empty() -> bool`**_empty-page**

Adds an empty page between an odd page and the next. Used to check when to remove the header and place a raggiera in the bottom left corner.

Parameters`_empty-page() -> content`**_nameref**

It displays a reference using section name (instead of numbering). From Hallon 0.1.3

Parameters`_nameref(label) -> content`**_raggiera-image**

Inserts a raggiera, given a specified width.

Parameters`_raggiera-image(width: length) -> content`

width `length`

Width of the raggiera.

banner

Draw a banner.

Parameters

`banner`(`body`: `content`) \rightarrow `content`

body `content`

Body of the banner.

tab-numbering

Alternative numbering: "1.1." + h-space.

Parameters

`tab-numbering`(
 `h-space`: `length`,
 `..n`: `arguments`
) \rightarrow `content`

h-space `length`

Horizontal space.

Default: `0.7em`

`..n` `arguments`

Numbers.

chapter-numbering

Chapter numbering.

Parameters

`chapter-numbering`(`..n`: `arguments`) \rightarrow `content`

`..n` `arguments`

Numbers.

header-number

Numbering used in the theses header.

Parameters

`header-number(. . n: arguments) -> content`

`..n` `arguments`

Numbers.

_sizes `dict`

`\TeX` sizes to match original templates (<https://tex.stackexchange.com/questions/24599/what-point-pt-font-size-are-large-etc>)

_document-state `state`

The current state (title page, front-,main-,backmatter...)

_document-type `state`

The current type of document.

_localization `dict`

Localization dictionary. It could be deprecated since theses are written exclusively in English.

bluepoli `color`

Signature PoliMi colour (■), used in headings and labels.

Figures styling

_subfigure-caption

It displays the caption of subfigures. Use “(a)” that will be colored based on `colored-headings` parameter.

Parameters

```
_subfigure-caption(  
    colored-caption: bool,  
    parent: figure,  
    it  
) -> content
```

colored-caption bool

Whether to apply bluepoli on captions

Default: true

parent figure

Parent figure of this subfigure

Default: none

_style-figures

Style-figures handles (optional heading-dependent) numbering of figures and subfigures. Can modify the caption of all figures.

Parameters

```
_style-figures(  
    colored-caption: bool,  
    heading-levels: int,  
    body  
) -> none
```

colored-caption bool

Whether to apply bluepoli on captions (Figure 1).

Default: true

heading-levels int

Heading level to account for in the numbering.

Default: 0