

modern-um-thesis

This is the documentation manual for the modern-um-thesis Typst template, generated using Tidy.

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Top Level

documentclass

All functions and variables to be used in the Typst thesis template for University of Macau.

Parameters

```
documentclass(  
  doctype: "doctor" "master" "bachelor",  
  date: datetime,  
  lang: "en" "zh" "pt",  
  double-sided: bool,  
  print: bool,  
  info: dictionary  
) -> dictionary
```

doctype "doctor" or "master" or "bachelor"

Type of thesis

Default: "doctor"

date datetime

Date of submission

Default: datetime.today()

lang "en" or "zh" or "pt"

Language of the thesis

Master's theses must be written in English.

If you choose "master" doctype, DO NOT select the other 2 languages.

Default: "en"

double-sided bool

Enable double-sided printing

For Doctoral theses, double-sided printing is required (i.e. please set to true).

For Master's and Bachelor's theses though, single-sided printing is strongly recommended, but double-sided printing is still allowed.

Default: true

print bool

Add margins to binding side for printing

In most cases, this should be set to true.

Default: true

info dictionary

Thesis information, including:

title-en: Title of Thesis, **required**

title-zh: 论文标题

title-pt: Título da Tese

author-en: Name of Author, **required**

author-zh: 作者姓名

author-pt: Nome do Autor

degree-en: Degree Title, **required**

degree-zh: 学位名称

degree-pt: Doutorado

academic-unit-en: Name of Academic Unit, **required**

academic-unit-zh: 学术单位名称

academic-unit-pt: Nome da Unidade Acadêmica

supervisor-en: Name of Supervisor, **required**

supervisor-zh: 导师姓名

supervisor-pt: Nome do Supervisor

co_supervisor-en: Name of Co-Supervisor

co_supervisor-zh: 共同导师姓名

co_supervisor-pt: Nome do Co-Supervisor

department-en: Name of Department

department-zh: 系名称

department-pt: Nome do Departamento

Apart from all **required** entries above, if you choose a language other than “en”, you must also provide translations for all **required** entries in that language.

Default: (:)

Layouts

doc

Document metadata & global settings

Parameters

```
doc(  
  date: datetime,  
  doctype: "doctor" "master" "bachelor",  
  lang: "en" "zh" "pt",  
  double-sided: bool,  
  print: bool,  
  info: dictionary,  
  body: content  
) -> content
```

date datetime

Date of submission

Default: datetime.today()

doctype "doctor" or "master" or "bachelor"

Type of thesis

Default: "doctor"

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

double-sided bool

Enable double-sided printing

Default: true

print bool

Add margins to binding side for printing

Default: true

info dictionary

Thesis information

Default: (:)

frontmatter

Set up front matter environment

Parameters

```
frontmatter(  
  doctype: "doctor" "master" "bachelor",  
  lang: "en" "zh" "pt",  
  body: content  
) -> content
```

doctype "doctor" or "master" or "bachelor"

Type of thesis

Default: "doctor"

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

mainmatter

Set up main matter environment

Parameters

```
mainmatter(  
  doctype: "doctor" "master" "bachelor",  
  lang: "en" "zh" "pt",  
  body: content  
) -> content
```

doctype "doctor" or "master" or "bachelor"

Type of thesis

Default: "doctor"

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

appendix

Set up appendix environment.

Example:

```
#show: appendix  
= Appendices <appendices>  
== What do I put in here <section>  
Material that is related to, but\ not  
appropriate for, inclusion in\ the text,  
can be placed in the\ appendices. They  
must meet the\ formatting requirements  
described\ in this document.
```

Appendix A Appendices

A.1. What do I put in here

Material that is related to, but not appropriate for, inclusion in the text, can be placed in the appendices. They must meet the formatting requirements described in this document.

Parameters

```
appendix(  
  doctype: "doctor" "master" "bachelor",  
  lang: "en" "zh" "pt",  
  body: content  
) -> content
```

doctype "doctor" or "master" or "bachelor"

Type of thesis

Default: "doctor"

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

Pages

cover-ms

Generate cover page for Master's thesis

This is a replica of the thesis cover .doc file provided by University of Macau

You can simply call `#cover()` instead of `#cover-ms()`. The document will automatically choose the correct cover based on the doctype parameter.

Parameters

```
cover-ms(  
  date: datetime,  
  double-sided: bool,  
  info: dictionary  
) -> content
```

date datetime

Date of submission

Default: `datetime.today()`

double-sided bool

Enable double-sided printing

Default: `true`

info dictionary

Thesis information

Default: `(:)`

cover-phd

Generate cover page for PhD thesis

You can simply call `#cover()` instead of `#cover-phd()`. The document will automatically choose the correct cover based on the doctype parameter.

Parameters

```
cover-phd(  
  date: datetime,  
  lang: "en" "zh" "pt",  
  double-sided: bool,  
  info: dictionary  
) -> content
```

date `datetime`

Date of submission

Default: `datetime.today()`

lang `"en"` or `"zh"` or `"pt"`

Language of the thesis

Default: `"en"`

double-sided `bool`

Enable double-sided printing

Default: `true`

info `dictionary`

Thesis information

Default: `(:)`

declare-ms

Generate Quote Slip (declaration page) for Master thesis

You can simply call `#declare()` instead of `#declare-ms()`. The document will automatically choose the correct declaration based on the `doctype` parameter.

Parameters

```
declare-ms(  
  date: datetime,  
  lang: "en" "zh" "pt",  
  double-sided: bool,  
  address: str content,  
  telephone: str content,  
  fax: str content,  
  email: str content  
) -> content
```

lang `"en"` or `"zh"` or `"pt"`

Language of the thesis

Default: `"en"`

double-sided `bool`

Enable double-sided printing

Default: `false`

declare-phd

Generate declaration page for PhD thesis

You can simply call `#declare()` instead of `#declare-phd()`. The document will automatically choose the correct declaration based on the doctype parameter.

Parameters

```
declare-phd(  
  date: datetime,  
  lang: "en" "zh" "pt",  
  double-sided: bool  
) -> content
```

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

double-sided bool

Enable double-sided printing

Default: false

abstract

Generate thesis abstract page

When doctype is “master”, this is a replica of the thesis abstract .doc file provided by University of Macau

When doctype is “doctor” or “bachelor”, this is merely a heading.

Parameters

```
abstract(  
  doctype: "doctor" "master" "bachelor",  
  lang: "en" "zh" "pt",  
  double-sided: bool,  
  info: dictionary,  
  keywords: list of string,  
  body: content  
) -> content
```

doctype "doctor" or "master" or "bachelor"

Type of thesis

Default: "doctor"

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

double-sided `bool`

Enable double-sided printing

Default: `true`

info `dictionary`

Thesis information

Default: `(:)`

keywords `list of string`

Thesis keywords (Listed in metadata and after abstract)

Default: `()`

outline-image

List of Figures

Parameters

```
outline-image(lang: "en" "zh" "pt") -> content
```

lang `"en" or "zh" or "pt"`

Language of the thesis

Default: `"en"`

outline-table

List of Tables

Parameters

```
outline-table(lang: "en" "zh" "pt") -> content
```

lang `"en" or "zh" or "pt"`

Language of the thesis

Default: `"en"`

outline-table-image

List of Tables and Figures

Parameters

```
outline-table-image(lang: "en" "zh" "pt") -> content
```

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

Public Utility Functions

This section documents utility functions used in the `modern-um-thesis` template.

These functions are defined in the `/src/utis` folder and are callable by the end-user.

fill

A box that fills the available space with spaces

Parameters

`fill(width) -> content`

hline

A horizontal line that stretches across the page

Parameters

`hline(stroke) -> content`

uline

Fill the available space with an underline

Parameters

`uline(width) -> content`

toprule content

The horizontal line at the top of a three-part table

midrule content

The horizontal line under the first row of a three-part table

bottomrule content

The horizontal line at the bottom of a three-part table

Private Utility Functions

This section documents utility functions used in the `modern-um-thesis` template.

These functions are defined in the `/src/utls` folder and are hidden from the end-user. They are documented here for development purposes.

camel-case

Converts a string to camel case format.

Parameters

```
camel-case(body) -> str
```

format-name

Converts a name string/content to format SURNAME, Given Name

Parameters

```
format-name(body) -> str
```

to-str

Converts a value to a string representation.

Parameters

```
to-str(it) -> str
```

pattern-heading-first-level

Generate the numbering pattern of first-level headings for package numbly

Parameters

```
pattern-heading-first-level(  
  lang: "en" "zh" "pt",  
  supplement: content  
) -> str
```

lang "en" or "zh" or "pt"

Language of the thesis

Default: "en"

supplement content

Supplementary of the heading

Default: [Chapter]

is-chapter-page

Returns whether the current page is one where a chapter begins. This is used for styling headers and footers.

This function is contextual.

Parameters

`is-chapter-page()` -> `bool`