

UNIVERSITY

Department

# OmniLaTeX Minimal Starter Guide

Your Name

Submitted in partial fulfillment of the requirements for the degree of Master of Science

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**Defense Date:** October 31, 2025

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City, Country

October 31, 2025

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# 1. Introduction

This is a minimal starter template demonstrating all major OmniLaTeX capabilities. Each section shows one feature with minimal but idiomatic usage.

## 1.1. Text Formatting

Basic text with **bold**, *italic*, and monospace fonts. Unicode support:  $\alpha\beta\gamma$ ,  $\mathbb{R}\mathbb{C}\mathbb{N}$ ,  $\forall\exists\in\ni$ .

## 1.2. Citations

Reference bibliography entries with `\cite{}`: [**knuth1984texbook**]. Multiple citations: [**lamport1994latex**; **goossens1994latex**].

## 1.3. Cross-References

Reference sections with `\ref{}`: See Section 2. Reference figures: Figure 4.1. Reference tables: Table 4.1.

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## 2. Lists and Structures

### 2.1. Unordered Lists

- First item
- Second item
  - Nested item
  - Another nested item
- Third item

### 2.2. Ordered Lists

1. First step
2. Second step
3. Third step

### 2.3. Description Lists

**OmniLaTeX** Universal LaTeX template

**LuaLaTeX** Modern LaTeX engine

**KOMA-Script** Document class collection

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## 3. Mathematics

### 3.1. Inline Math

Einstein's famous equation:  $E = mc^2$ . Pythagorean theorem:  $a^2 + b^2 = c^2$ .

### 3.2. Display Math

The quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \quad [3.1]$$

Maxwell's equations:

$$\nabla \cdot \mathbf{E} = \frac{\rho}{\epsilon_0} \quad [3.2]$$

$$\nabla \cdot \mathbf{B} = 0 \quad [3.3]$$

$$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t} \quad [3.4]$$

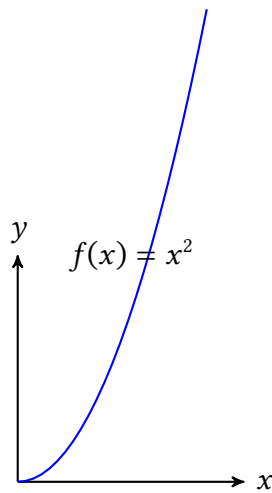
$$\nabla \times \mathbf{B} = \mu_0 \mathbf{J} + \mu_0 \epsilon_0 \frac{\partial \mathbf{E}}{\partial t} \quad [3.5]$$

Reference equations: Equation [3.1].

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## 4. Figures and Tables

### 4.1. Figures



**Figure 4.1:** Example TikZ figure showing  $f(x) = x^2$ .

### 4.2. Tables

**Table 4.1:** Example table with data.

Item	Value 1	Value 2
First	10.5	20.3
Second	15.2	18.7
Third	12.8	22.1

## 5. Code Listings

### 5.1. Python Example

```
1 def fibonacci(n):  
    """Calculate the nth Fibonacci number."""  
    if n <= 1:  
        return n  
5    return fibonacci(n-1) + fibonacci(n-2)  
  
print(fibonacci(10)) # Output: 55
```

**Code Listing 5.1:** Recursive Fibonacci function in Python.

### 5.2. LaTeX Example

```
1 \documentclass{article}  
\begin{document}  
Hello, \LaTeX{ }!  
\end{document}
```

**Code Listing 5.2:** Minimal LaTeX document.

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## 6. Glossaries and Acronyms

### 6.1. Using Glossaries

This template uses ?? for typesetting. The ?? is a research university in Hamburg.

Using ?? and ?? again.

?? are essential for computing. ?? is the short form only. ?? is the long form only.

### 6.2. Adding New Terms

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## 7. Advanced Features

### 7.1. Boxes and Callouts

**Note:** This is an example callout box. You can add important information here.

### 7.2. TODO Notes

### 7.3. Hyperlinks

External link: <https://www.latex-project.org/>

Link with text: [CTAN Package Repository](#)

Email: [example@example.com](mailto:example@example.com)

### 7.4. Footnotes

This text has a footnote<sup>1</sup>. Multiple footnotes<sup>2</sup> are possible<sup>3</sup>.

### 7.5. Colors

Text can be [red](#), [blue](#), or [green](#).

---

<sup>1</sup>This is the footnote text.

<sup>2</sup>First footnote.

<sup>3</sup>Second footnote.

You can define custom colors in your document or institution configuration.

## 8. Bibliography and References

All citations appear automatically in the bibliography. Add entries to `../../bib/bibliography.bib`.

Example BibTeX entry:

```
@book{knuth1984texbook,  
  author = {Donald E. Knuth},  
  title = {The TeXbook},  
  year = {1984},  
  publisher = {Addison-Wesley}  
}
```

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# A. Appendix Example

Appendices use the same chapter structure. They're automatically labeled A, B, C, etc.

## A.1. Additional Data

Extra information that doesn't fit in the main text.

## A.2. Supplementary Code

```
1 | #!/bin/bash  
  | # Build script example  
  | latexmk -pdf main.tex
```

## Symbols

`\printglossary` doesn't work with the `record=only` package option use `\printunsrtglossary[type=symbols]` instead (or change the package option). This message will be removed once the problem has been fixed.

## Numbers

`\printglossary` doesn't work with the `record=only` package option use

`\printunsrtglossary[type=numbers]`

instead (or change the package option). This message will be removed once the problem has been fixed.

## Index

`\printglossary` doesn't work with the `record=only` package option use

`\printunsrtglossary[type=index]`

instead (or change the package option). This message will be removed once the problem has been fixed.

## Abbreviations

`\printglossary` doesn't work with the `record=only` package option use

`\printunsrtglossary[type=abbreviations]`

instead (or change the package option). This message will be removed once the problem has been fixed.

## Subscripts

`\printglossary` doesn't work with the `record=only` package option use

`\printunsrtglossary[type=subscripts]`

instead (or change the package option). This message will be removed once the problem has been fixed.

## Non-printed entries

`\printglossary` doesn't work with the `record=only` package option use

`\printunsrtglossary[type=notprinted]`

instead (or change the package option). This message will be removed once the problem has been fixed.