석(박) 사 학 위 논 문

3cm spacing

학위 논문 제목

부제가 있을 경우 중앙에 위치

여백 조정 가능

고 려 대 학 교 대 학 원

0.5cm 여백

OOO 학과

0.5cm 여백

홍 길 동

3cm spacing

2023년 2월

김 철 수　교 수 지 도
0.5cm 여백
석(박) 사 학 위 논 문
2-3cm 여백
학위 논문 제목 부제가 있을 경우 중앙에 위치 여백 조정 가능
이 논문을 O학 석(박)사학위 논문으로 제출함
2-3cm 여백
2023년 2월
2-3cm 여백
고 려 대 학 교　대 학 원
0.5cm 여백
OOO 학과
1cm 여백
홍길동 (인)

1cm 여백
홍길동의 O학 석(박)사학위 논문 심사를 완료함
2-3cm 여백
20OO년 O월
2cm 여백
위 원 (인)
0.5cm 여백
위 원 (인)
0.5cm 여백
위 원 (인)
0.5cm 여백
위 원 박사의 경우 추가 (인)
0.5cm 여백
위 원 박사의 경우 추가 (인)
0.5cm 여백

국문 제목

by 홍길동
OO 학과
지도교수 : 김철수

국문 초록

국문 학위논문의 초록은 국문, 영문의 순서로 작성하며, 영문 학위논문의 초록은 영문, 국문의 순서로 작성하며, 학위논문을 기타 외국어로 작성하는 경우 초록은 기타 외국어, 영문, 국문의 순서로 작성한다.

초록에는 논문제목, 성명, 학과, 지도교수를 기재하며 초록 하단에 주요어(keywords)를 표기한다. 페이지 번호는 초록부터 본문 전까지 작은 로마 숫자(Roman numerals, e.g., i, ii, iii, iv...)를 사용한다.

중심어 : 중심어, 중심어, 중심어, 중심어, 중심어, 중심어

Title

by Gildong Hong
Department of OOOO
under the supervision of Professor Chulsu Kim

ABSTRACT

The text of the abstract begins here.

The above title line (ABSTRACT) is styled using `\large` and `\textbf`.

Paragraph text is styled using default style.

Pages should be assigned from the abstract using small Roman numericals (i, ii, iii, iv, v, etc.)

Keywords : Keyword, Keyword, Keyword, Keyword, Keyword, Keyword

Preface

The text of the preface begins here.

사사

필요한 경우 사사를 작성한다.

서문(Preface)에서 사사(acknowledgments)와 관련된 내용을 기술한 경우, 생략할 수 있다.

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기호 설명

M	original mass matrix
K	original stiffness matrix

Subscripts

b	interface boundary
d	dominant

Abbreviation

CMS	Component Mode Synthesis

Chapter 1

Introduction

The following formatting information is intended to illustrate several acceptable ways of preparing a thesis or dissertation for your convenience.

The first level heading is styled using chapter. Chapter 1 is styled with `\chapter{Introduction}`. You can put `\label{chap:intro}` to refer to this chapter.

The first paragraph of every chapter, section or subsection is, by default, set to be nonindented.

1.1 Second Level Heading

The second level subheading is styled using section. Section 1.1 is styled with `\section{Second Level Heading}`. You can put `\label{sec:section}` to refer to this section.

1.1.1 Third Level Heading

The above third level subheading is styled using subsection. Subsection 1.1.1 is styled with `\subsection{Third Level Heading}`. You can put `\label{subs:subsection}` to refer to this subsection.

It will appear in the Table of Contents, automatically.

1.2 Referencing headings

Suppose that you want to refer to the first section. The first section (of the first chapter) was labeled with `\label{sec:section}`. You can call the section by typing `\ref{sec:section}` : Subsection 1.1

Chapter 2

Organizing and Formatting

2.1 Paper Size and Margins

The paper size of the thesis/dissertation shall be B5. For the first three preliminary pages (including the cover page, title page and signature page) before the abstract, all margins (top, bottom, left and right) shall be at least 3 cm. From the abstract on, the top and bottom margins shall be at least 3cm and the left and right margins shall be at least 2 cm (Table 2.1).

2.2 Fonts and Size

The default font size is set to 11pt. In LaTeXyou can use commands like `\normalsize`, `\large`, `\Large`, `\LARGE`, `\huge`, and so on, to specify the size of the font. We relate the above commands to 11pt, 14pt, 16pt, 18pt and 21pt, respectly, of the MS word templete. Thus, there are slight differences of font size in MS word templete and in LaTeXtemplete. The below (Table 2.2) is the comparison table for the font size. [1]

Here is how we put tables and footnote in LaTeX. To typeset a table, use the environment `tabular` and specify the columns. The above table has three center-aligned columns ;

```
\begin{tabular}{ccc} ... \end{tabular}
```

[1] `https://tug.org/texinfohtml/latex2e.html#Font-sizes`

You can also use advanced version of `tabular`, which are `taubularx`, `tabulary`, `tabu`, to manipulate the typeset of tables.

It is desirable to put the `tabular` environment inside the `table` environment. You can add caption by `\caption{...}`. The labeling `\label{...}` for future reference should be followed just after the caption. All the tables in the `table` environment will be included in the 'List of Tables'.

2.3 Figures and Equations

To include the figure file in the document, you can use `includegraphics` command, which require `graphicx` package.

```
\includegraphics[width=.2\textwidth]{kumark.png}
```

You can specify the width or the height of the figure inside the square brackets and the file name (with or without the extension) inside the braces.

It is desirable to put the `includegraphics` command inside the `figure` environment. Again, the labeling need to be followed just after the caption. All the tables in the `table` environment will be included in the 'List of Tables'.

Figure 2.1: Korea University Global Symbol

You can type an equation with inline math mode like $E = mc^2$. Or you can type

$$E = mc^2$$

to express the equation in display math mode. The above equation is an unnum-

bered. To number the equation automatically, you can use `equation` environment;

$$E = mc^2 \tag{2.3.1}$$

The number or the tag of the above equation reads 'the first eqeuation of the section 2.3'. If you add one more equation, you can get the second eqaution of the section 2.3.

$$e^{i\theta} = \cos\theta + i\sin\theta. \tag{2.3.2}$$

You can also specify tha tagging explicitly by

$$E = mc^2 \tag{$*$}$$

To express a list of equations, you can use the `gather` environment, which just enumerate equations vertically. For example, suppose that you want to express a system of linear equations $x + y + z = 3$, $x - y + 2z = 1$, $x + 3z = 2$.

$$x + y + z = 3 \tag{2.3.3}$$
$$x - y + 2z = 1 \tag{2.3.4}$$
$$x + 3z = 2, \tag{2.3.5}$$

If you want to unnumber the equations, use `gather*` environment;

$$x + y + z = 3$$
$$x - y + 2z = 1$$
$$x + 3z = 2,$$

Note that the above system is not well aligned. To align the equations horizontally, with respect to the equality sign, you can use `align` (or `align*`) environment

$$\begin{aligned} x + y + z &= 3 \\ x - y + 2z &= 1 \\ x + 3z &= 2 \end{aligned}$$

`align` environment (instead of `align*` environment) tags every equation of the system

$$x + y + z = 3 \tag{2.3.6}$$
$$x - y + 2z = 1 \tag{2.3.7}$$
$$x + 3z = 2 \tag{2.3.8}$$

If you want one tagging for the system, you can use the `aligned` environment and the `equation` environment, simultaneously

$$\begin{aligned} x + y + z &= 3 \\ x - y + 2z &= 1 \\ x + 3z &= 2 \end{aligned} \tag{2.3.9}$$

Finally, you can label and refer an equation, by `\label{...}` and `\eqref{...}`. For example, you can say that 'The root of (2.3.9) is $x = 2$, $y = 1$, $z = 0$'.

The environments `align`, `gather` and others, are the environments provided by the `amsmath` package. For more information to typeset the equation neatly, refer to `http://www.ams.org/arc/tex/amsmath/amsldoc.pdf`.

<table>
<tr><th>Order</th><th>Note</th><th>Margin</th><th>Pagination</th></tr>
<tr><td>Cover page</td><td></td><td rowspan="4">top, bottom,
left & right at
least 3 cm</td><td rowspan="4">None</td></tr>
<tr><td>Blank page</td><td></td></tr>
<tr><td>Title page</td><td></td></tr>
<tr><td>Signature page</td><td></td></tr>
<tr><td>Abstract</td><td>both English & Korean</td><td></td><td></td></tr>
<tr><td>Dedication page</td><td>optional</td><td rowspan="9">top & bottom
at least 3cm

left & right at
least 2 cm</td><td rowspan="6">i, ii, iii, iv, ⋯</td></tr>
<tr><td>Preface</td><td>if necessary</td></tr>
<tr><td>Acknowledgements</td><td>optional</td></tr>
<tr><td>Table of contents</td><td></td></tr>
<tr><td>List of tables</td><td rowspan="2">if there are tables or
figures in the main
body</td></tr>
<tr><td>List of figures</td></tr>
<tr><td>Nomenclature</td><td>optiona</td><td rowspan="5">1, 2, 3, 4, ⋯</td></tr>
<tr><td>Blank page</td><td></td><td>None</td></tr>
<tr><td>Main body</td><td></td><td rowspan="4"></td></tr>
<tr><td>Reference</td><td></td></tr>
<tr><td>Appendices</td><td>optional</td></tr>
<tr><td>index</td><td>optional</td></tr>
</table>

Table 2.1: Organizing and formatting thesis/dissertation

	Size Requirements	LaTeXStyle
Thesis title	21	`\huge`
The school name (Graduate School, Korea University)	18	`\LARGE`
All other parts are 16 points (department, name, advisor, master's thesis, $\cdots$, submitted, $\cdots$ completed, etc.)	16	`\Large`
Year, month and day	14	`\large`
Main Text	10–12	`\normalsize`
Heading	None	
Figure caption	None	
Table caption	None	

Table 2.2: Requirement for font size and the style used in this manuscript

Chapter 3

Discussion

Discussion starts here.

Chapter 4

Conclusion

Conclusion starts here.

Reference(or Bibliography)

[1] C. Adams, M. Chu, T. Crawford, S. Jensen, K. Siegel and L. Zhang, *Stick index of knots and links in the cubic lattice*, J. Knot Theory Ramif. **21** (2012) 1250041.

참고문헌

부록

A. 부록 제목

색인

필요한 경우 색인(index)을 작성한다.