FORMAT FOR THESEs

The Institute for Graduate Studies
in
Science and Engineering

Boğaziçi University
FORMAT FOR THeses

The Institute for Graduate Studies
in
Science and Engineering

A Guide for TypeSetting
M.S. and PH.D. Theses Submitted to the
Institute for Graduate Studies in
Science and Engineering

Boğaziçi University
2011
# TABLE OF CONTENTS

1. INTRODUCTION ......................................................... 1
2. GENERAL INSTRUCTIONS ........................................... 2
3. FORMAT ........................................................................ 3
   3.1. Character Fonts ................................................... 3
   3.2. Spacing .............................................................. 3
   3.3. Centering ............................................................ 3
   3.4. Margins ............................................................... 4
   3.5. Pagination .......................................................... 4
   3.6. Headings ............................................................. 6
      3.6.1. Main Headings ............................................... 6
      3.6.2. Second Headings .......................................... 7
      3.6.3. First Subheadings ....................................... 7
      3.6.4. Second Subheadings .................................... 8
      3.6.5. Special Captions ......................................... 8
   3.7. Footnotes ........................................................... 9
   3.8. Bibliographical Material ....................................... 9
   3.9. Specially Designated Expressions ............................. 14
   3.10. Tables and Figures ............................................ 15
4. ARRANGEMENT .......................................................... 17
   4.1. Title Page .......................................................... 17
   4.2. Approval Page .................................................... 17
   4.3. Dedication .......................................................... 17
   4.4. Acknowledgements .............................................. 18
   4.5. Abstract ......................................................... 18
   4.6. Table of Contents, List of Figures, List of Tables, List of Symbols and
        List of Acronyms/Abbreviations ................................ 18
   4.7. The Main Body of the Thesis ................................... 19
   4.8. Appendices ........................................................ 19
5. PREPARATION OF THE FINAL COPIES ............................. 21
5.1. Typesetting ........................................ 21
5.2. Paper Quality .................................... 21
5.3. Printer ........................................... 21
5.4. Reproduction .................................... 21
5.5. Binding .......................................... 21
6. PUBLICATION OF THESES .......................... 22
   6.1. Use of Copyrighted Material .................... 22
   6.2. Publications .................................... 22
APPENDIX A: SAMPLE PAGES .......................... 23
   Thesis Cover Format ................................ 24
   Example of Title Page for M.S. Theses ............ xxiv
   Example of Approval Page .......................... xxv
   Example of Acknowledgements ...................... xxvi
   Example of Abstract ................................ xxvii
   Example of Özet .................................... xxviii
   Example of Table of Contents ........................ xxix
   Example of List of Figures .......................... xxx
   Example of List of Tables ........................... xxxi
   Example of List of Symbols .......................... xxxii
   Example of List of Acronyms/Abbreviations ........ xxxiii
   Example of Introduction ............................. 34
   Example of Figure and Citing ....................... 35
   Example of Table, Footnote, Item List and Theorem 36
   Example of Proof .................................... 37
   Example of Algorithm and Equation ................ 38
   Example of the First and Second Subheadings .... 39
   Example of Conclusion ............................... 40
   Example of References ............................... 41
APPENDIX B: FORMAT OF DATA DISKS CONTAINING COMPUTER SOFTWARE .......................... 43
1. INTRODUCTION

The procedures and rules set forth in the following pages are for the guidance of graduate students preparing theses at the Institute for Graduate Studies in Science and Engineering, Boğaziçi University will be referred as ‘the Institute’ in the remainder of this document. These materials are not intended, however, as a complete manual for the writing of theses.

Much helpful information will be found in other publications, some of which are listed on Pages 41 and 42. The student should consult those which are relevant to her field of study. As to the specific requirements, those listed herein should be followed.

Some matters of form are local and concern the weight of paper used, the title page, the table of contents, and the like. These requirements are stated in Chapter 3 and 4.

Every thesis must feature grammatical and format correctness and clarity of expression. The responsibility for such correctness and clarity rests primarily upon the candidate, nevertheless, every thesis should be scrutinized for these qualities by the student’s Thesis Supervisor and the Defense Jury.
2. GENERAL INSTRUCTIONS

The following rules and statements are presented more as answers to questions frequently asked rather than an alphabetically indexed coverage of every contingency. If, for good reason, a student should seek exception to the practices here, he/she should consult his/her thesis supervisor and the Institute.

An M.S or Ph.D thesis should be submitted to the candidate’s thesis supervisor for review of form and content at least two weeks before the date set for the meeting of the Executive Board of the Institute for selection of the Defense Jury. After the approval by the thesis supervisor, copies of the thesis should be submitted to the members of the Defense Jury at least two weeks before the thesis defense.

The thesis defense is scheduled by the Defense Jury and the candidate’s supervisor in accordance with the rules and regulations of the University. When the thesis is approved by the Defense Jury, it should be typeset and bound. The approval page of the final copy must be signed by all members of the Defense Jury. Only one bound copy of the thesis should be submitted to the Institute. The Institute would check the final copies of theses to assure correctness of format and consistency in content and in bibliographic style. The Institute would deliver two of the bound copies to the Boğaziçi University Library.
3. FORMAT

3.1. Character Fonts

Text must be typed in Times or Times New Roman. The font size must be 12 points in the text including formulas, equations, Table headings, Table and Figure captions. Text which appear in Figures, Tables, super and subscripts must be at least 8 points. Footnotes, long biographical quotes and extensive quotations must be 10 points.

3.2. Spacing

Spacing of the text material should be 1.5 or when necessary integer multiples thereof. For example, when a paragraph ends, the next one starts after pressing RETURN twice (2 x CR) to get two 1.5 spacings.

The following are exceptions:

- *Footnotes*: single spacing
- *Long biographical quotes*: single spacing
- *Extensive quotations*: single spacing and indented 1 cm relative to the text material.

3.3. Centering

The center point of titles and headings should be 112 mm from the left edge of the paper or 98 mm from the right edge. The appropriate centering command in computer typesetting can be used.
3.4. Margins

Margins of pages should conform to the following specifications:

- Left margin: 3.5 cm from the edge of the paper
- Right margin: 2 cm from the edge of the paper
- Top margin: 3.5 cm from the edge of the paper (page numbers must be 2 cm from the edge of the paper)
- Bottom margin 2 cm from the edge of the paper

The above margins should be observed for charts, graphs, Tables and drawings as well. Folded papers cannot be accepted unless there is absolutely no other way for the material to be presented.

3.5. Pagination

Each page in the thesis (except the title page) is expected to bear a page number. Only one side of the paper may be used. The pages must be bound so that the printed sides of the pages should be on the right side of the booklet.

The preliminary section, including the title page; copyright page, if any; foreword, preface, or acknowledgements; Table of Contents, etc., should be numbered, using lower case Roman numerals, e.g., i, ii, iii, etc. The title page counts as Page i, but the number should not appear. The sequence of the preliminary section is as in Table 3.1. An example for this sequence is provided in Appendix A.

For the remainder of the thesis, Arabic numerals are used. Each page should be numbered with the exception of pages bearing Figures in landscape orientation. These pages do not bear a number, however page numbers continue to increment. Page numbers are to be placed two centimeters from the top and right hand margins on the pages and must be 12 points including all pages for Figures, Tables, Appendices, References, etc. Use of suffixes, such as 25a, 25b, etc. will not be approved. The numbering in the
Table 3.1. Pagination Table. Page numbers are given as an example where each part takes only one page.

<table>
<thead>
<tr>
<th>Page Name</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Page</td>
<td>Page i (number does not appear)</td>
</tr>
<tr>
<td>Page of Approval</td>
<td>Page ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>Page iii (if necessary)</td>
</tr>
<tr>
<td>FOREWORD</td>
<td>Page iv (if necessary)</td>
</tr>
<tr>
<td>PREFACE</td>
<td>Page v (if necessary)</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>Page vi</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>Page vii</td>
</tr>
<tr>
<td>ÖZET</td>
<td>Page viii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>Page ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>Page x (if necessary)</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>Page xi (if necessary)</td>
</tr>
<tr>
<td>LIST OF SYMBOLS</td>
<td>Page xii (if necessary)</td>
</tr>
<tr>
<td>LIST OF ACRONYMS/ABBREVIATIONS</td>
<td>Page xiii (if necessary)</td>
</tr>
</tbody>
</table>

The main body of the thesis should begin with Page 1 and run consecutively to the last page. No punctuation, such as dash or a period, should accompany the page number.

Paragraphs must be uniformly indented one centimeter. Series of paragraph items which are to be listed without headings under any of the regular headings may, for clarity, be preceded by a special bullet •, or enumerated by (i), (ii), (iii), etc. Sub-series of paragraph items are also allowed and should be preceded by the alternate special bullet. For example, if (i), (ii) and (iii) are used in the first level, the items in the second level must be preceded by the bullet •. Sub-sub series of items are not allowed, if necessary appropriate headings should be used. Do not use bold face for series of paragraph items. Item lists for which usage of special bullets seem inappropriate such as enzyme lists and chemical supplies may be presented as a Table. Example for the item lists can be found on Page 36. A new paragraph should not begin at the bottom.
of a page if there is not sufficient space for at least (2 x CR). A paragraph should be separated from the preceding and succeeding paragraphs by (2 x CR).

3.6. Headings

Headings should be in Times or Times New Roman and should feature no quotation nor punctuation marks other than the period following the heading number. There may be at most four levels of headings which are main headings, second headings, first subheadings and second subheadings. Additionally, special captions to designate theorems, corollaries, lemmas, definitions, remarks and propositions may be deployed. Headings should be followed by at least one line of text (i.e. headings should not directly be followed by Tables or Figures).

Table 3.2. Summary of Heading specifications

<table>
<thead>
<tr>
<th>Main headings</th>
<th>centered</th>
<th>capital letters</th>
<th>bold face</th>
<th>14 pt</th>
<th>no period at the end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second headings</td>
<td>centered</td>
<td>title case letters</td>
<td>bold face</td>
<td>12 pt</td>
<td>no period at the end</td>
</tr>
</tbody>
</table>

3.6.1. Main Headings

Main headings, numbered such as 1., 2. and so on should obey the following rules:

- They should begin a new page and be centered according to Section 3.3. Omit period at the end of the heading. Main headings should be typed in bold face and should be in capital letters and in 14 points.
- Main headings should reflect content of the text that follows. Main headings are not to be called as chapters.
- The number of the headings should be followed by a period and two spaces.
- They should precede the following text material or second heading by (3 x CR).
3.6.2. Second Headings

Second headings, numbered such as 2.1., 2.2. and so on should obey the following rules:

- They should be centered according to Section 3.3 and be typed in 12 points, bold face and title case letters (i.e., the first letter of each word except conjunctions, prepositions and articles must be a capitalized). Omit period at the end of heading.
- The number designation of the second heading should be followed with a period and two spaces.
- Second headings should be (2xCR) below preceding text and (2xCR) above of succeeding text, but need not begin a new page.

3.6.3. First Subheadings

First subheadings, numbered such as 2.1.1., 2.1.2., etc., should obey the following rules:

- They should be typed on separate lines beginning at the left margin of the text, but need not begin a new page.
- They should be typed in bold face in 12 points and with title case letters.
- The number designation of the heading should be followed by a period and two spaces. Omit period at the end of the heading.
- First subheadings should be separated from the preceding and succeeding text by (2 x CR).

Example of a second subheading can be found on 39.
3.6.4. Second Subheadings

Second subheadings, numbered such as 2.1.1.1., 2.1.1.2., etc., should obey the following rules; however, second subheading should be avoided if possible.

- They should be typed on the same line as the text they introduce, beginning at the left margin of the text.
- They should be typed in 12 point, in title case letters.
- They should be followed by a period at the end of the heading and must be underlined.
- The number designation should be followed by a period and two spaces.
- Second subheadings should be separated from the preceding text by (2 x CR).

Example of an second subheading can be found on 39.

3.6.5. Special Captions

Special captions may be deployed to initiate theorems, lemmas, propositions, corollaries and definitions. Special captions should obey the following rules:

- The special captions should be bold and in 12 points, title case letters.
- They should be typed on the same line as the text they initiate, beginning at the left margin of the text.
- The following text block should be in italics and not more than one paragraph.
- Each special caption should be preceded with a number where the first numeral indicates the chapter number and the second numeral which is separated from the first with a period begins with unity and increases sequentially throughout each chapter across all special caption types.
- For theorems, lemmas and corollaries a series of proof or remark blocks may follow. The first proof block should initiate with the word Proof written in italics while the remaining of the block and the following blocks are regular type. The last proof block should terminate with a □ at the lower right corner.
Example of Theorem and Proof representation can be found on 36 and 37, respectively.

3.7. Footnotes

Footnotes should obey the following rules; however, footnotes should be used only if absolutely necessary:

- Footnote references should be indicated in the text by an Arabic number placed superior to the text and immediately following the word, phrase or sentence which the footnote concerns.
- Footnotes should be sequential for each page and for the entire thesis.
- Footnotes should be placed at the bottom of the page on which they are indicated. They should be indented from the left margin of the text by one centimeter and placed under a broken line made of 20 characters (5 cm). Footnotes should be single-spaced and 10 points.

Example of a footnote can be found on Page 36.

3.8. Bibliographical Material

As already noted in the introduction of this manual, theses should follow the form used in scholarly publications of the student’s field of research. Rules of form vary from one field to another, and it is important that the student learn the editorial usages of his/her own field. In this regard, the usage of bibliographical management programs such as EndNote, Zotero or Mendeley is recommended. It is generally important that he/she follow such usages consistently throughout his/her thesis. Only one of the two following citation methods must be used throughout the thesis:

- The numerical reference of bibliographical material should be indicated in the text by an Arabic numeral in square brackets placed in the text immediately following the name, word, phrase, or sentence which the reference concerns (in
some cases, this may be the author’s name). The number in square brackets such as “[8]”, should indicate the order of first appearance of the reference in the text. The listing of references in the bibliography should be in the order in which they are used in the text and shall bear the same number as was used in the reference in the text. When more than 3 consecutive bibliographical references are to be cited, they should be denoted by ranging the first and the last such as [2-6]. A style file of the Endnote bibliographical management program in line with these rules can be downloaded from the Institute’s web site under Thesis Guidelines.

- Citation of the relevant reference could also be done in the (surname of the first author, year) type. If an author has more than one reference in a calendar year, letters a, b or c should follow the year, e.g., “(Erman, 1990a,b)”. If there are two authors for the reference, both surnames should be included followed by the year, e.g., “(Erman and Ünal, 1998)”. If there are more than two authors, only the surname of the first author should be included followed by et al., e.g. “(Erman et al., 1997)”. The listing of references in the bibliography, in this case, should be in alphabetical order by the surname of the first author. A style file of the Endnote bibliographical management program in line with these rules can be downloaded from the Institute’s web site under Thesis Guidelines.

In line with the two alternative citation formats described above there are two ways to list the sources in the manuscript’s reference list (in the References section). The sources may be listed by the order of appearance in the text or they may be listed alphabetically by authors’ surname. The sources should be left justified. When the first method of listing is used, the references should be preceded by the corresponding Arabic number. If the second method is used, the references should not be preceded by a bullet point or number. When the author is anonymous or unknown for any one source, the source should be inserted in the alphabetical list using the title of the source instead of the author’s name. All sources should be listed together; there should not be separate lists for books versus journal articles versus electronic sources. The reference list should be on a separate page from the rest of the manuscript and should be simply titled ‘References’ and should be in the same font and size as the main headings of the thesis. Examples for the below rules can be found on Page 41.
When listing a book in an enumerated references list, the order should be as follows:

- The author’s or editor’s name (or names) (Surname, initials of the first author and the initial, surname for the rest),
- The title of the book (in italics),
- If it is an edition other than the first,
- The name of the publisher,
- The city the book was published in,
- The year the book was published.

When listing journal articles in an enumerated list, the order of information should be as follows:

- The author’s name (or names) (Surname, initials of the first author and the initial, surname for the rest),
- The title of the article (between quotation marks),
- The title of the journal (in italics),
- As much other information as you can find about the journal, for example the volume and issue numbers,
- The page number/s of the article in the journal (p for single page, pp for the range of pages),
- The year of publication.

When listing conference papers in an enumerated list, the order of information should be as follows:

- The author’s name (or names) (Surname, initials of the first author and the initial, surname for the rest),
- The title of the conference paper (between quotation marks),
- In: followed by editor or name of organisation,
- Full title of conference (in italics),
• Location
• Date
• Publisher,
• Place of publication
• The year of publication.

When listing dissertations in an enumerated list, the order of information should be as follows:

• The author’s name (Surname, initials),
• The title of the dissertation (in italics),
• Level
• Official name of the university
• The year of publication.

When listing websites in an enumerated list, the order of information should be as follows:

• The author’s name (Surname, initials) or source,
• The title of web document or page (in italics),
• Year
• URL
• Accessed date

When listing a book in an alphabetically ordered references list, the order should be as follows:

• The author’s or editor’s name (or names)(Surname, initials of the first author and the initial, surname for the rest),
• The year the book was published,
• The title of the book (in italics),
• If it is an edition other than the first,
• The name of the publisher,
• The city the book was published in.

When listing journal articles in an alphabetically ordered references list, the order of information should be as follows:

• The author's name (or names)(Surname, initials of the first author and the initial, surname for the rest),
• The year of publication,
• The title of the article (between quotation marks),
• The title of the journal (in italics),
• As much other information as you can find about the journal, for example the volume and issue numbers,
• The page number/s of the article in the journal(p for single page, pp for the range of pages).

When listing conference papers in an alphabetically ordered list, the order of information should be as follows:

• The author's name (or names)(Surname, initials of the first author and the initial, surname for the rest),
• The year of publication,
• The title of the conference paper (between quotation marks),
• In: followed by editor or name of organization,
• Full title of conference (in italics),
• Location
• Date
• Publisher,
• Place of publication.

When listing dissertations in an alphabetically ordered list, the order of information should be as follows:
• The author’s name (Surname, initials),
• The year of publication,
• The title of the dissertation (in italics),
• Level
• Official name of the university.

When listing websites in an enumerated list, the order of information should be as follows:

• The author’s name (Surname, initials) or source,
• Year
• The title of web document or page (in italics),
• URL,
• Accessed date.

When listing sources that are not cited in the text, use the rules for the enumerated references list, except using enumeration at the beginning of each entry and order the list alphabetically. Representation of citing and References are exemplified on Pages 35 and 41.

3.9. Specially Designated Expressions

Specially designated expressions usually mean equations, formula, etc. and they need to obey the following rules:

• They should be centered on the page according to Section 3.3 and separated from the preceding text and the succeeding text by (2×CR).
• The expressions should be identified by an Arabic number in parentheses like “(2.1)”, “(2.2)”, “(2.3)”, etc., which should be placed opposite the expression and in line with the right margin of the text. They should be numbered within each chapter in the order of their appearance.
• Mathematical formula and expressions must be typeset according to a consistent
math-style throughout the whole thesis. The standard style for mathematical expressions in scientific publications makes use of italic typeface for variables in Latin characters and on-italic typeface for mathematical signs (+, −, parentheses, etc.). Bold characters are usually reserved for vectors and matrices. The style used for in-text formula should be the same as that of displayed formula. Examples of equations could be examined from figure A.

3.10. Tables and Figures

Tables and Figures are technical matters, and the proper form should be understood and followed after a candidate has received instructions from his/her thesis supervisor. To ensure satisfactory reproduction, drawings, graphs, etc., should be prepared in contrasting colors, preferably in black. Also note that all floating items such as graphs, charts, photographs, illustrations and lists should be considered and designated as a Figure or Table, whichever is appropriate.

Tables and Figures should be enumerated within each chapter, i.e., as 2.1, 2.2, 2.3, 3.1, 3.2, etc. The designation of each Table or Figure within the text should have only the first letter in capital (i.e., such as 'Table 4.5' or 'Figure 3.8') throughout the thesis. Sub-figures should be enumerated by adding the corresponding lowercase letter to the Figure designation such as Figure 3.8a. The information about the sub-figures should be included in the caption of the Figure.

Table captions are located above the Tables whereas Figure captions are placed below the Figures. All captions should end with a period. When a Figure is divided into two or more pages, each Figure piece should include the Figure’s legend if it has one. Also, each Table or Figure piece should have its own caption. With the exception of the first piece, it should be stated in the caption of the Figure or Table piece that it is the continuation of the previous one by putting cont. at the end of the caption.

All Tables should be framed. Fonts of the texts in the Tables should be consistent with the rest of the text. Table headers may be boldface but colored texts are not
allowed as Table headers. Figures may be colored where necessary. Figures should not have an embedded title in the Figure since the caption should include the necessary information. All axes should have titles. Tables, Figures and their captions should be centered as shown in the examples on through the text. The captions should be as normal text, i.e., only the first letter should be capitalized. The captions should be at a distance of (1 x CR) from the Table or Figure and should continue for 3 lines at most. If a Table or Figure needs further explanation, it should be provided in the associated text block. Explanation may come before or after the Figure as long as it refers to the right Figure. If there are too many large or consecutively related Figures or Tables, they should be put to the appendix and designated by a capital letter indicating the appendix number and a number starting from 1 and increasing sequentially throughout the appendix section across all Tables and Figures, such as A1, A2, .... You may refer to Table 3.1 as an example of Table representation. Also, examples of Table, Figure and Algorithm representations can be found on Pages 36, 35 and 38.
4. ARRANGEMENT

4.1. Title Page

When preparing the Title Page, the candidate should list his/her prior degree(s) showing the major, the degree granting institutions and dates in chronological order. This page should not bear a page number. Examples of Title Page for an M.S. thesis is presented on Page xxiv. These examples should be carefully followed as to form and spacing. At the bottom of the example page, at the place where the year is shown, the semester date (year only, viz. 2001) in which the requirements for the degree are completed should be written.

4.2. Approval Page

All copies of the submitted thesis should include original signatures of the Defense Jury on the approval page. This page should be prepared in accordance with the example on page xxv and should follow the Title Page. The names of the members of the Defense Jury should be listed one below the other in alphabetical order, except the Thesis Supervisor’s, whose name should be at the top of the list. Titles of the Jury members should be presented in the North American style, such as Prof., Assoc. Prof., Assist. Prof. preceding a Jury member’s name. If desired and appropriate, the term 'Ph.D.' may follow a Jury member name (separated by a comma from the name). Space for the signature of each Jury member should be left beside each name. The date at the bottom of the page is the date at which the thesis is approved by the Defense Jury.

4.3. Dedication

Occasionally, authors would like to dedicate their thesis to their family members, friends or some scientists in their area of research. The dedication page should come right after the Approval Page. Dedications should be in English and placed at the
4.4. Acknowledgements

The candidate may desire to include a page with a brief note of an acknowledgement of help received from particular people. All organizations proving financial support must also be acknowledged and grant numbers should be included. You may see an example on Page xxvi.

4.5. Abstract

The Abstract should give the information that will enable a scholar to tell whether he/she wishes to read the complete work. Therefore, the abstract should cover the following points: Statement of the problem, procedure or method, results, conclusions. Two abstracts, one in English and the other in Turkish, should be included. The abstract should contain no headings, tabular material, chemical formulae, or footnotes. Abstracts should not contain references, but author citing is allowed. Abstract should be at most one page long.

The abstract page should contain the title of the thesis. The Turkish Abstract ("Özet") must follow the English Abstract in the same format. An example of an abstract to be included in the thesis is given on Page xxvii.

4.6. Table of Contents, List of Figures, List of Tables, List of Symbols and List of Acronyms/Abbreviations

Theses are expected to have a “Table of Contents” for the convenience of the reader. “Table of Contents” entry should not be in the Table of Contents. If figures and tables are scattered throughout the text, a separate “List of Figures” (and/or “List of Tables”) must be included after the Table of Contents. These lists should include page numbers. Similarly, a “List of Symbols” (or “List of Symbols/Abbreviations”, as appropriate) should be included. Examples of such materials are shown on Pages . “List
of Symbols” can contain symbols listed alphabetically as separate groups ordered as Latin symbols, Greek symbols, and other symbols. “List of Accronyms/Abbreviations” contains abbreviations listed alphabetically. Examples for these can be found on Pages xxix, xxx, xxxi and xxxiii.

4.7. The Main Body of the Thesis

The main body of the thesis should follow at this point. The main body should be composed of a series of chapters starting with an Introduction chapter and ending with a Conclusion chapter. The remaining chapters may include one or more of the following main topics: Literature Survey, Problem Statement, Materials and Methods, Results and Discussion or other relevant topics.

The first page of the first chapter should be the first page enumerated in Arabic numerals. When writing your thesis, pay attention to some of the precautions listed below:

- The whole text should be left and right justified.
- Please note the spelling of “Foreword”.
- Periods, commas, semicolons and colons go outside the quotation marks.
- The word “data” is plural and requires a plural verb.
- Integers from one to nine, inclusive, should be spelled out except when they represent a chapter or a section; for number 10 and above, use numerals. Numbers should be spelled out when they begin a sentence.
- Do not spell out per cent; use %.

4.8. Appendices

A last section may contain supporting data for the text in the form of one or more appendices. Examples of appendix material include data sheets, questionnaire samples, flowcharts, illustrations, maps, software listings, charts, etc. If the appended data need to include oversize illustrations or maps, several alternative methods of inclusions are
available.

If a Section, Table, Figure, Equation etc., is to be included in an Appendix, the numbering should follow the same rules used within the thesis. In this case, however, they should begin with the letter of the respective appendix such as “Table A.1”, “Equation B.4” etc. Each appendix should have a descriptive title just like chapter headings (Examine the appendices provided).

The developed computer program should be given in a separate diskette or CD.

The format and contents of this diskette or CD is explained in Appendix B of this booklet.
5. PREPARATION OF THE FINAL COPIES

5.1. Typesetting

Computer typesetting programs such as \TeX\ or \LaTeX\ are highly recommended. Theses written in MS-WORD for Windows (Version 6.0 or later) are also acceptable.

5.2. Paper Quality

The original copy should be typed on 75 or 80 gr/m2 A4-size white paper. All reproduced copies should be of the same grade of paper.

5.3. Printer

Only laser or Ink Jet printer output are acceptable. Printer settings should comply with A4-size paper and should be so that the page is not resized in printing.

5.4. Reproduction

Photocopy reproduction is acceptable while mimeographed or ditto copies are not acceptable for all parts or copies of the thesis submitted to the Institute or to the Library. Care should be taken to insure that the proper grade of paper is used at all times and that copying contrast is dark.

5.5. Binding

The thesis should be bound in dark blue hard cover. The final bound size of the thesis should conform to A4 size. The name and surname of the candidate, the type of degree obtained and the year should be printed in the above order on the spine of the cover. When the thesis is placed front cover up, the spine should read from left to right. The format of the front cover is depicted on Page 30.
6. PUBLICATION OF THESESES

6.1. Use of Copyrighted Material

Authors of theses must assume full responsibility for use of any copyrighted material in their manuscripts. Written permission of the copyright owner must be obtained when extensive use is contemplated.

Permission to quote extensively from copyrighted material or to reproduce a figure should be obtained by the candidate from the author or the publisher, whichever holds the copyright. Customarily, authorization is granted on the condition that proper acknowledgement is made. In some instances, however, copyright granting permission to include such material should be kept on file by the candidate for later reference in case questions arise.

6.2. Publications

Theses, or extracts from them, may be published only upon release for publication by the major supervisor and provided proper credit is given to Boğaziçi University. No thesis may be published as such before it has been approved by the major supervisor. All theses and separately submitted abstracts are the property of the University.

As many theses will be important to other scholars and to a more general body of readers, candidates for degrees should plan for publication of their work.
APPENDIX A: SAMPLE PAGES

The following pages present examples of some thesis pages typeset in the format described in the preceding chapters. They include the pages to be found in the preamble of a thesis (such as title and approval pages, table of contents, etc.), as well as examples of list of references and the abstract to be submitted separately to the Institute. Also the format of the cover for the bound copy is shown. Furthermore, this booklet (except its title page) is typeset in the format required for the theses.

of referencing journal articles, books, articles in a book, theses, conference papers, reports, and articles in the Internet.

Study the examples in the following pages carefully regarding form, font type and size, and spacing. You may consult the Institute Secretariat for questions you might have.
The cover should be deep blue and the texture should have small grains. Binding should use stitches; stapled binding is not acceptable. To avoid rejections use the services of a high quality binding office. You can get list of approved binding offices from the Institute secretary.
TIO₂ SEMICONDUCTOR PHOTODEGRADATION
OF SUBSTITUTED RESORCINOLS: KINETIC AND
MECHANISTIC STUDIES

AYŞEN EREN ÖKTE

BOĞAZİÇİ UNIVERSITY
1999
THESIS TITLE

APPROVED BY:

Prof. Name Surname ............................
(Thesis Supervisor)

Assoc. Prof. Name Surname ............................

Assist. Prof. Name Surname ............................

Name Surname, Ph.D. ............................

DATE OF APPROVAL: DD.MM.YYYY
ACKNOWLEDGEMENTS

Acknowledgements come here...
ABSTRACT

THESIS TITLE

One page abstract will come here.
ÖZET

TEZ BAŞLIĞI

Bir sayfa uzunluğunda özet gelecektir.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................... xxvi
ABSTRACT ...................................................... xxvii
ÖZET ............................................................ xxviii
LIST OF FIGURES ............................................. xxx
LIST OF TABLES .............................................. xxxi
LIST OF SYMBOLS ............................................. xxxii
LIST OF ACRONYMS/ABBREVIATIONS ......................... xxxiii
1. INTRODUCTION ............................................. 34
2. EXPERIMENTS AND RESULTS ................................ 35
   2.1. Sample section ......................................... 35
      2.1.1. Example of First Subheadings ..................... 39
          2.1.1.1. Example of Second Subheadings ............... 39
3. CONCLUSION ............................................... 40
REFERENCES .................................................. 41
LIST OF FIGURES

Figure 2.1. Sin and Cosine. ................................................. 35

Figure 2.2. Principal Component Analysis Algorithm ................. 38
LIST OF TABLES

Table 2.1. Sample table .......................... 35
LIST OF SYMBOLS

$a_{ij}$ Description of $a_{ij}$

$A$ State transition matrix of a hidden Markov model

$\alpha$ Blending parameter or scale

$\beta_t(i)$ Backward variable

$\Theta$ Parameter set
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D</td>
<td>Two Dimensional</td>
</tr>
<tr>
<td>3D</td>
<td>Three Dimensional</td>
</tr>
<tr>
<td>AAM</td>
<td>Active Appearance Model</td>
</tr>
<tr>
<td>ASM</td>
<td>Active Shape Model</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

Start with an introduction...
2. EXPERIMENTS AND RESULTS

Experiments and results come here...

2.1. Sample section

Always place some text after headings before putting a graphics into a section as seen in Figure 2.1.

Figure 2.1. Sin and Cosine.

Now, let us cite some studies: one source as [1], two sources as [1, 2] or you may cite three or more sources as [1–3]. Observe that they are ordered in the references chapter in the same order as they are cited. Let us put a sample table as seen in Table 2.1. Please pay attention that the caption is followed by a period.

Table 2.1. Sample table.

<table>
<thead>
<tr>
<th></th>
<th>Header 1</th>
<th>Header 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Bla bla bla</td>
<td>Bla bla bla</td>
</tr>
<tr>
<td>Row 2</td>
<td>Bla bla bla</td>
<td>Bla bla bla</td>
</tr>
</tbody>
</table>
Footnotes should be avoided as possible. If there is an absolute necessity, footnotes should be used as this.\footnote{Example of a footnote}

Item lists may be represented as follows:

- This is an item. Do not use boldface for the items.
  - This is a sub-item. Subsub-items are not allowed.
- Another item.

Item lists may also be represented as follows:

- This is another enumerated item.
  - This is another sub-item.

**Theorem 2.1.** The solutions of the equation $ax^2 + bx + c = 0$ with $a \neq 0$ are

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

**Proof.** We use the method of completing the square to rewrite $ax^2 + bx + c$.

$$ax^2 + bx + c = a \left( x^2 + \frac{b}{a}x + \right) + c$$

$$= a \left( x^2 + \frac{b}{a}x + \left( \frac{b}{2a} \right)^2 - \left( \frac{b}{2a} \right)^2 + c \right)$$

$$= a \left( x + \frac{b}{2a} \right)^2 - a \left( \frac{b}{2a} \right)^2 + c$$

$$= a \left( x + \frac{b}{2a} \right)^2 - \frac{b^2 - 4ac}{4a}.$$ 

Therefore $ax^2 + bx + c = 0$ can be rewritten as

$$a \left( x + \frac{b}{2a} \right)^2 - \frac{b^2 - 4ac}{4a} = 0,$$

\footnote{Example of a footnote}
which can in turn be rearranged as

\[
(x + \frac{b}{2a})^2 = \frac{b^2 - 4ac}{4a^2}.
\]

Taking square roots gives

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

which implies

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

as required.

Finally, we will put a sample algorithm (PCA algorithm) using the relevant package in a figure as shown in Figure 2.1 and sample equations.

\[\bar{s} = \frac{1}{N} \sum_{i=1}^{N} s_i \quad (2.1)\]

\[Q = \begin{bmatrix} s_1 - \bar{s} & s_2 - \bar{s} & \cdots & s_N - \bar{s} \end{bmatrix}_{2L \times N} \quad (2.2)\]

\[C_s = \frac{1}{N} Q^T Q \quad (2.3)\]

\[C_s e_k = \lambda_k e_k \quad (2.4)\]
Require $s_i$, $i = 1, 2, \ldots, N$ are normalized

Compute the mean $\bar{s}$ using Eq. 2.1;

Form the $N \times 2L$ matrix $Q$ as defined in Eq. 2.2;

if $N < 2 \times L$ then
  $Q \leftarrow Q^T$;
end if

Compute the covariance matrix $C_s$ using Eq. 2.3;

Decompose $C_s$ to its eigenvectors $e_k$ and eigenvalues $\lambda_k$ satisfying Eq. 2.4;

if $N < 2 \times L$ then
  for $k = 1$ to $K$ do
    $e_k \leftarrow \text{Q}e_k$;
    $e_k \leftarrow e_k/||e_k||$ (normalization);
  end for
end if

Figure 2.2. Principal Component Analysis Algorithm.
2.1.1. Example of First Subheadings

Some text here

2.1.1.1. Example of Second Subheadings. Some text here too.
3. CONCLUSION

The conclusions of the thesis should come here.
REFERENCES


APPENDIX B: FORMAT OF DATA DISKS CONTAINING
COMPUTER SOFTWARE

Listings of software should be given in a diskette/CD as specified by the Institute. The diskette/CD should contain files containing the source code, one or more sample input and corresponding output separately. Other than these, there must be another file named ‘README.TXT’.

In this ASCII text file, the following sections must appear:

• Files in the Disk: In this section, the names of the files together with their contents must be listed.

• Hardware Requirements: In this section, the equipment, graphics card, mouse, disk capacity, RAM capacity etc. necessary to run the software must be noted.

• Software Requirements: In this section, the operating system, the compiler, linker, and the libraries etc. necessary to compile and link the software must be listed. Please note that no copyrighted material file (compiler, library etc.) should be put on the disk without obtaining the necessary license from the copyright owner.