

# MS (THESIS) Guidelines

This section contains information to format the THESIS Report in Department of Physics, NED University of Engineering and Technology. It is important to thoroughly read this document to properly organize and format your THESIS report. Reports that do not fulfill all of the criteria mentioned in this document will not be approved by the department.

To keep a consistent format of THESIS report among all students, it should be formatted in the following manner.

Thesis is divided into three sections: Front Section, Main Body, and Back Section.

- 1) Front Section is from the Title page to the Similarity Index Report page.
- 2) Main Body is from the first chapter Introduction till the last chapter Conclusion.
- 3) Back Section includes the content after the Main Body. It includes References, Appendices, Glossary, and Letter of Copyright Permission (if required).

## **Page Numbering:**

The style of page numbering of the Front Section is different from the Main Body and Back Section. Page numbers should be shown on all pages at the bottom-center of pages except on the front title page and blank pages (if any). However, ensure that the title page and blank pages are counted in the page numbering.

### ***Front Section:***

- Page numbers in the front section must be labeled in lower case Roman numerals (i, ii, iii)
- Title page should be considered as a page i, however, do NOT show page numbering on the title page. Therefore, page numbering should be shown from the next page (that is page ii).
- The details of pages that should be included in the front section are mentioned later in this document.

### ***Main Body and Back Section:***

- In these two sections, Arabic numerals (that is 1, 2, 3 ...) should be used.
- The first page of the Main Body section will be labeled as page number “1” (that is re-start page numbering from this section).
- However, the page numbering will remain continuous afterward. That is page numbering should remain continuous from the first page of the main body section until the last page of the back section.

The front matter of the thesis should be organized in the following order.

| <b><i>Page Headings</i></b> | <b><i>Page Number</i></b> | <b><i>Remarks</i></b>  |
|-----------------------------|---------------------------|--|
| Title page                  | -                         | <p>Compulsory page.</p> <p>Follow the sample title page given in the thesis template. This page should include Copyright Notice, with the date and year the document is submitted. Moreover, signatures of the author(s) and supervisor(s) are required on this page.</p> <p>Avoid using formulae, Greek letters, superscripts, and symbols on the title page because this will make it difficult to search your thesis online. Replace Greek letters with their names.</p> <p>This page will be “counted” as page number i, however, the page number should not be visible on the front page.</p> |
| Author's declaration        | ii                        | <p>Compulsory page (to be signed by all group members).</p> <p>Page numbering should be visible on this page and the following pages. This page will be counted as page number ii.</p>   |
| Statement of Contributions  | iii                       | <p>Compulsory page.</p> <p>Mention the contributions of each student in the thesis</p>   |

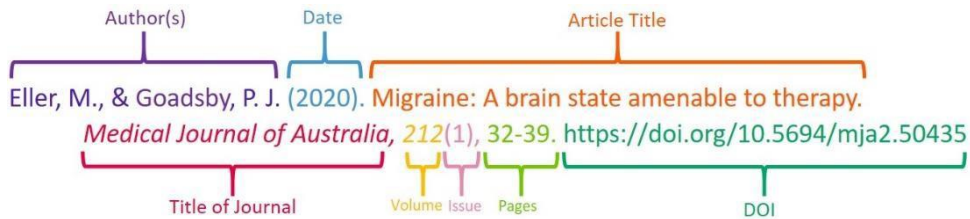
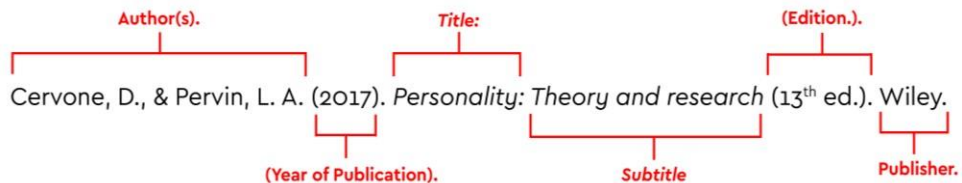
|                   |      |  |
|-------------------|------|--|
|                   |      | <p>report work. Clearly state who contributed to each task and to which extent. It should be in bullet points. For example:</p> <ul style="list-style-type: none"> <li>• Mr. AB and BC have performed modeling, simulation, and finite element analysis of the wind turbine blades.</li> <li>• Mr. XY and YZ have performed fabrication work. They visited markets to purchase fiberglass, steel, and other materials for the wind turbine.</li> <li>• Mr. AB carried out 4 out of 7 experiments while Mr. YZ carried out the remaining 3 experiments. However, all group members have jointly planned the experiments and interpreted the results.</li> <li>• All authors contributed equally to write the thesis.</li> </ul> |
| Executive Summary | iv   | <p>Optional page.</p> <p>The summary should be less than 350 words.</p>  |
| Acknowledgements  | v    | Compulsory page.   |
| Dedication        | vi   | Optional page.   |
| Table of contents | vii  | Compulsory page.   |
| List of figures   | viii | <p>Skip this page if the document does not have any figures.</p> <p>Figures should be properly numbered according to their chapter numbers. They should follow the usual guidance on margins. The caption of figures should be on the same page as the figure and should be located at the bottom of the figures.</p> <p>Figures must be properly referenced in the text (do not write the “above/below figure” instead write the figure number). Figures must be embedded after and close to where they have cited for the first time.</p>  |

|   |      |   |
|---|------|---|
|   |      | Most of the figures must be from the original work of the students. Extensive use of figures from other sources is not allowed.   |
| List of tables                                      | ix   | <p>Skip this page if the document does not have any table.</p> <p>Tables should be properly numbered according to their chapter numbers. They should follow the usual guidance on margins. The caption of tables should be on the same page as the table and should be located at the top of the tables.</p> <p>Tables must be properly referenced in the text (do not write the above/below table instead write the table number). Figures must be embedded after and close to where they have cited for the first time.</p> |
| List of abbreviations                               | xi   | Skip this page if you have not used abbreviations in your report.   |
| List of symbols                                     | xii  | <p>Skip this page if you have not used symbols.</p> <p>If you have used symbols in your report, then the description of those symbols should be given on this page. A two-column format can be used as given in the template. Moreover, you can also arrange and categorize symbols into sub-headings for ease of reading.</p>  |
| Graphic or quote                                    | xiii | <p>Skip this page if you do not wish to include a graphic or quote.</p> <p>However, you can include a graphic or a relevant quote on this page.</p>   |
| United Nations Sustainable Development Goals (SDGs) | xiv  | <p>Compulsory page.</p> <p>Mark the appropriate SDGs related to the research on this page. Remember that this page should be the last page of the front matter before the main body of the thesis.</p>  |
| Similarity Index                                    | xv   | Plagiarism test must be conducted on the thesis by  |

|        |  |
|--------|--|
| Thesis | <p>the research supervisor using Turnitin Software, or any other software approved by the university. Students will be required to bring the similarity in acceptable range as prescribed below:</p> <p>(a) Overall acceptable range of similarity index either from student's own previous work or the work of some other person(s) is less than 20%.</p> <p>(b) Maximum acceptable range of similarity index from an individual link is 5%.</p> <p>(c) While conducting a similarity test, the following settings should be followed:</p> <ul style="list-style-type: none"> <li>• Exclude bibliographic material = Yes</li> <li>• Exclude small matches = Yes</li> <li>• Exclude matches by Word count = 5 words</li> <li>• All other settings left at default</li> </ul> <p>Research Supervisor is required to sign the Similarity Index Report provided in the THESIS template file if the similarity is found as per rules defined above.</p> <p>Moreover, include the first and last page of the plagiarism report generated by Turnitin here. A sample of the plagiarism test report is provided with the THESIS template package.</p> |
|--------|--|

The back matter of the research should be organized in the following order.

| <b><i>Page Headings</i></b>    | <b><i>Remarks</i></b>   |
|--------------------------------|---|
| Letter of copyright permission | <p>Optional.</p> <p>If your research includes any substantial work from other authors, you may be required to take written permission from the authors and attach</p> |

|                              |  |
|------------------------------|--|
|                              | <p>of copyright permission with the thesis.</p> <p>A sample letter of copyright permission is provided. You may use this sample by replacing all text written inside square brackets with your own information.</p>  |
| References (or Bibliography) | <p>Compulsory page.</p> <p>All references should be included together at the end of the document. The reference not cited in the report should not be included in the reference list. For referencing any article and/or book <b>Numbered</b> or APA (American Psychological Association) referencing style must be used. Numbered style is preferable.</p> <p>Following are the examples of APA reference style to be used in the report.</p> <p><b>Journal Article Reference</b></p>  <p>Akhtar, M., Qamar, S. Z., Mehdi, S. M., &amp; Hussain, A. (2019). Diffusion-based swelling in elastomers under low-and high-salinity brine. <i>Journal of Elastomers &amp; Plastics</i>, 51(1), 75-84.</p> <p><b>Book Reference</b></p>  <p>Beer, F. P., Johnston, E. R., DeWolf, J. T., &amp; Mazurek, D. F. (2017). <i>Statics and mechanics of materials</i>. New York: McGraw-Hill Education.</p> |

|            |   |
|------------|---|
|            | <p>Arrange references in alphabetical order of the surnames of the first authors in the list of references. Moreover, if two references have the same first author, then arrange the references by the surname of the first author and then by the surname of the second author. Also note that for in-text citation APA uses the author's surname and the year of publication enclosed in brackets, for example (Shepherd, 1956).</p> <p><b>Following are the examples Numbered reference style to be used in the report.</b></p> <p><b>Journal Article Reference</b><br/> [1] R.M. Lokhande, V. Vinayak, S.V. Mukhamale, P.P. Khirade, Gamma radiation shielding characteristics of various spinel ferrite nanocrystals: a combined experimental and theoretical investigation, RSC Adv. 11 (2021) 7925–7937. [2] S.B. Narang, K. Pubby, Nickel spinel ferrites: a review, J. Magn. Magn Mater. 519 (2021), 167163.</p> |
| Appendices | Skip this page if the document does not have appendices.  |
| Glossary   | Skip this page if the document does not have a glossary.  |
| Index      | <p>Skip this page if the document does not have an index.</p> <p>However, if you have used any jargons or words not from your stream of specialization, or newly added words in the literature, take this opportunity to let your readers know what you mean by them. Arrange the words in alphabetical order.</p>  |

### Paper Size:

- A4 size paper should be used to print the document.

### Margins:

- Margins should be 1.5 inches on the binding edge. That is if the document is to be printed double-sided, left-side margin should be 1.5 inches for odd number pages and right-side margin should be 1.5 inches for even number pages. However, if the document is to be printed single-sided, the left-side should have 1.5 inches margin on all (even and odd) pages.

- All remaining margins should be 1 inch.
- Page numbers, headers, and footers can be within the above-described margins. However, a minimum gap of ½ inch is still required from the edge of pages.

**Binding:**

- Outside binding should be BLACK color

**Font:**

- Use Times New Roman with 12 font size. However, notes and captions should not be smaller than 10 points.
- Maintain consistency in the use of different typefaces for headings, footings, and titles.

**Line Spacing:**

- The spacing between lines should be 1.5 for the main body. However, headers, footnotes, tables, captions, and indented quotations should be single-spaced.
- Moreover, use single spacing for the front and back sections (nevertheless, 1.5 spacing can be used for appendices).

**Title page:**

- The format of the title page must be the same as the one given in the Thesis template.
- The name of the degree should not be abbreviated. For example, write Bachelor of Engineering instead of B.E.
- The copyright notice © must be present on the title page with the thesis submission year.

**Author's declaration:**

This page should include the following statement:

“We declare that we are the sole author(s) of this thesis. It is the actual copy of the thesis that was accepted by our supervisor(s) including any necessary revisions. We



also grant NED University of Engineering and Technology permission to reproduce and distribute electronic or paper copies of this thesis.”

### **Equations:**

Use MathType in MS Word to type equations. Equations should also be numbered according to their chapter numbers. All equations should be indented from the left margin and equation numbers be aligned to the right-side margin on the same line and enclosed the equation numbers in small brackets. For instance, if equations are present in chapter three, then equation numbers will be like (3.1), (3.2), (3.3), etc. Do not use solid or dotted lines between equations and their equation numbers.

If you like to cite an equation in the middle of a sentence, then write “Eq.” when referring to a single equation (or “Eqs.” when referring to several equations) before the equation number. However, if the equation is to be cited at the beginning of a sentence, then write “Equation” (or “Equations” when referring to several equations) before the equation number.

For example, “The formula of the laminar flow is given in Eq. (3.1). This formula is valid for specific range of Reynolds number. Equation (3.2) gives the formula of turbulent flow. Moreover, formulas of heat transfer rate for turbulent flow are given in Eqs. (3.3) and (3.4)”

$$V = \frac{s}{t} \quad (3.6)$$

### **Other Considerations:**

- Every chapter or section should be beginning from a new page.
- The first chapter of the report should be “Introduction” and the last chapter should be “Conclusions”. All chapters are the part of Main Body section of the report.
- American or British spelling and grammar can be used in the thesis; however, the author(s) should remain stick to one style throughout the document to maintain consistency.
- Words should not be divided from one page to the next page.
- Do not end a paragraph such that an isolated last line of the paragraph appears on the top of a page.
- Make sure that the document does not have an isolated heading at the bottom of the page that is not followed by its text on the same page.

- If a graph, figure, table, chart, etc. is required to be printed in landscape form, then they should be oriented facing away from the binding edge of the paper.
- If a graph, figure, table, chart, etc. cannot be reduced to the standard Letter size page, an oversized sheet may be used; but it should be folded to end within the text area of the page.
- All graphs, figures, tables, charts, etc. should follow the margin limit as described above.
- Use *italics* style for words other than English except proper nouns.
- Any reference system can be selected but it should remain consistent throughout the document.
- References must appear in ascending order where they have first cited.
- Do not forget to write “THIS PAGE IS INTENTIONALLY LEFT BLANK” at the center of the blank pages, if any.
- If you have used copyrighted material beyond a reasonable limit (e.g., the use is affecting the market value of the copyrighted material, you have substantially used the copyrighted material, and/or you have used it for commercial purpose instead of nonprofit educational purpose), a letter of permission should be submitted for the copyrighted material. The permission should be obtained from the owner of the work.
- Use the standard template as given in the thesis template package.

### **Guidelines to use the template of final year thesis (MS Word file):**

- Write your thesis details by replacing all text enclosed in square brackets in the thesis template file.
- Delete any text in the template that is written for your guidance.

#### **1. Heading Styles in thesis template:**

THESIS template has 6 types of heading styles. Use Heading 1 style for chapters, Heading 2 style for sections, and Heading 3 style for sub-sections.

Headings 1 style is aligned to the center of the page while all other heading styles are aligned to left margins. You have the freedom to change the alignments of headings, font themes, and font sizes of these heading styles. You can do this by going to the Home tab,

where you will find the Style section. In this section, right-click on the heading style that you want to change. Then, click on the Modify button and make your desired modifications.

## **2. Numbering of Headings in thesis template:**

The numbering of headings in this template has been done according to the legal numbering format. You can choose a different numbering style. You may also skip numbering after the 3<sup>rd</sup> heading level.

## **3. Table of Content:**

To update table of content, right click on the table, then click on “Update Field”. Do not manually add/delete contents in the table of content.

## **4. List of Figures and Tables:**

To update the list of figures or list of tables, right click on the list, then click on “Update Field”. Do not manually add/delete text in these lists.