

APPENDIX E

GUIDELINES FOR WRITING FINAL YEAR PROJECT REPORT

NOTE: This thesis formatting guideline is supported by the MS Word Template which can be downloaded from:

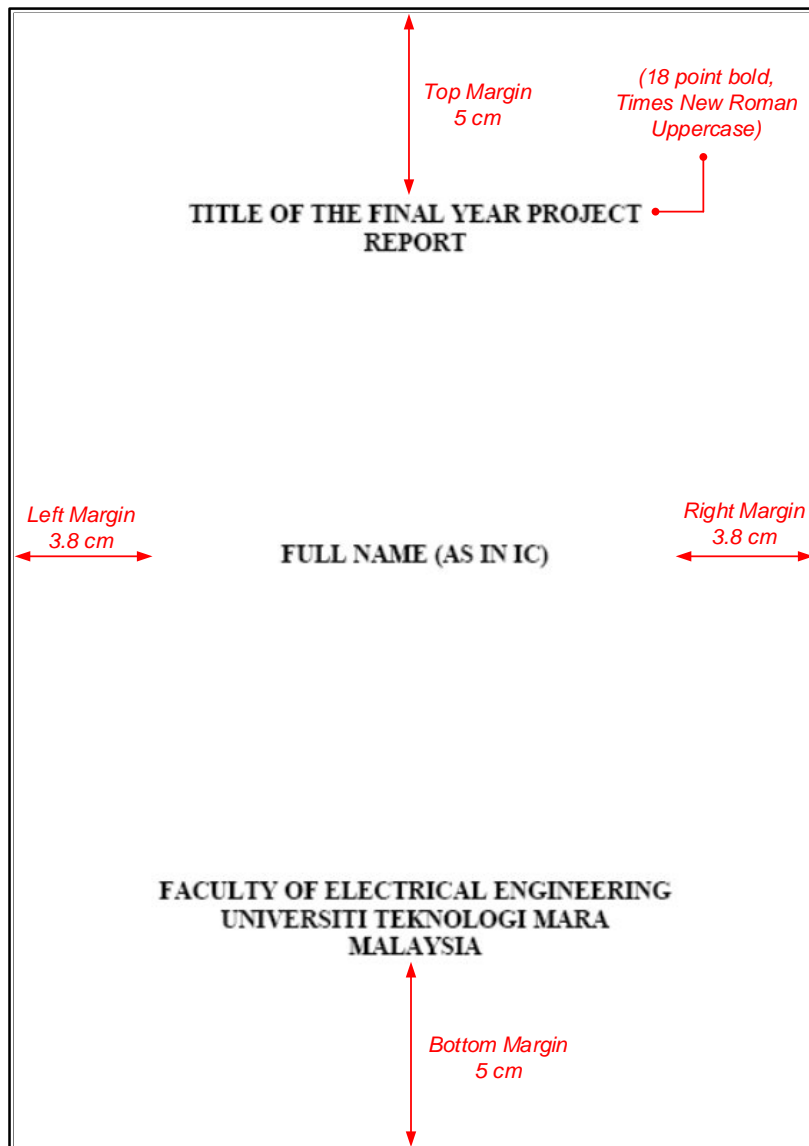
<https://fke.uitm.edu.my/v5x/index.php/2015-05-19-08-35-18/final-year-project>

1.0 Front Cover of Report

The front cover of the Final Year Project Report should contain the project title, author's full name as appeared in the IC, the faculty and university. This information should be typed in following format:

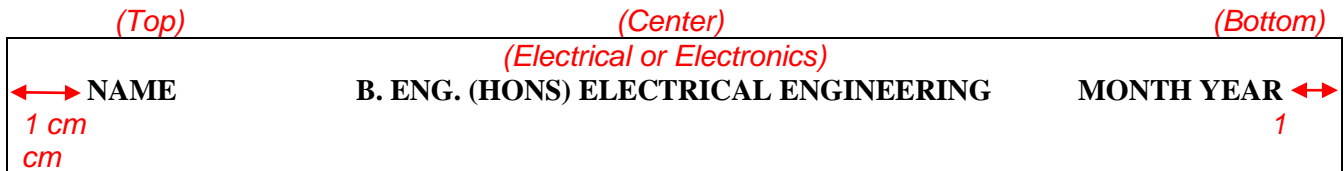
- Times New Roman font with 18-point bold uppercase (capital letter).
- All letters must be printed in gold.
- Hardbound cover must be in **black**.

Format of the cover page is as shown below:



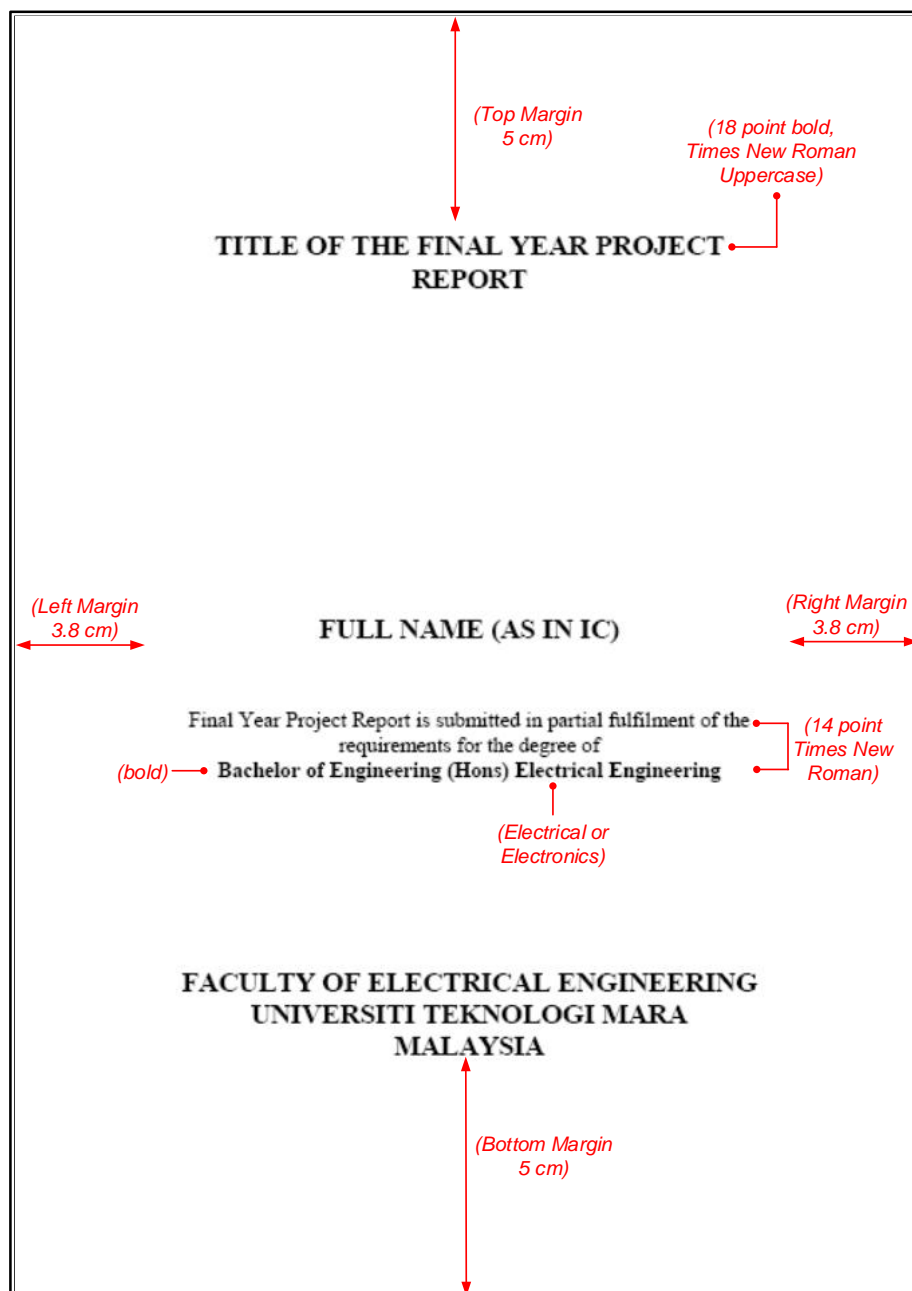
2.0 Spine of Report

The spine of the thesis should consist of name of author, name of degree programme (B. ENG. (HONS) ELECTRICAL ENGINEERING) as well as the month and the year of the thesis submission (NOVEMBER 2008). Font type is Times New Roman, uppercase, bold and gold printed. Please follow the format shown below:



3.0 Title Page

Title page consists of an additional declaration statement by the author as shown below:



4.0 Author's Declaration Page

The diagram shows a page layout for an author's declaration. At the top, the title "AUTHOR'S DECLARATION" is centered in bold 14-point font. The top margin is 2.5 cm. The main text is justified in 12-point font with 1.5 line spacing. The left margin is 3.8 cm and the right margin is 2.5 cm. The text includes a declaration of original work and an acknowledgment of university regulations. Below this is a form with fields for student details and supervisor approval. The bottom margin is 2.5 cm.

(14 point, bold, centred) → **AUTHOR'S DECLARATION** *(12 point, 1.5 lines spacing, justified)*

Top Margin
2.5 cm

I declare that the work in this final year project report was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This final year project report has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Undergraduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Left Margin
3.8 cm

Right Margin
2.5 cm

Name of Student	:	Full Name (as in IC)	<i>(Electrical or Electronics)</i>
Student I.D. No.	:	2019202020	
Programme	:	Bachelor of Engineering (Hons) Electrical Engineering	
Faculty	:	Electrical Engineering	
Title of The Final Year Project Report	:	Title of The Final Year Project Report	
Signature of Student	:	
Date	:	July 2019	
This Report is Approved by (Project Supervisor):	:	
		(Name of the Project Supervisor)	
Date	:	July 2019	

ii

Bottom Margin
2.5 cm

5.0 Format of Report

- Length of the report: Total number of words for the report should be in between **9,000 to 13,000** words. The total number of words does not include endnotes, quotations, appendixes, tables, and diagrams.
- Font Style: Times New Roman

c) Text Size and Style:

USAGE	FONT SIZE/STYLE
SECTION HEADING	14 point bold (Uppercase)
CHAPTER HEADING	14 point bold (Uppercase)
1.1 Heading	12 point bold (Title Case)
1.1.1 Sub Heading 1	12 point bold (Title Case)
1.1.1.1 Sub Heading 2	12 point bold italic (Title Case)
Body text	12 point

d) Line Spacing:

USAGE	LINE SPACING
Abstract / Acknowledgement	1
Body Text	1.5

e) Margins except for Cover and Title Page:

LOCATION	MARGIN
Left	3.8 cm
Right	2.5 cm
Bottom	2.5 cm
Top	2.5 cm

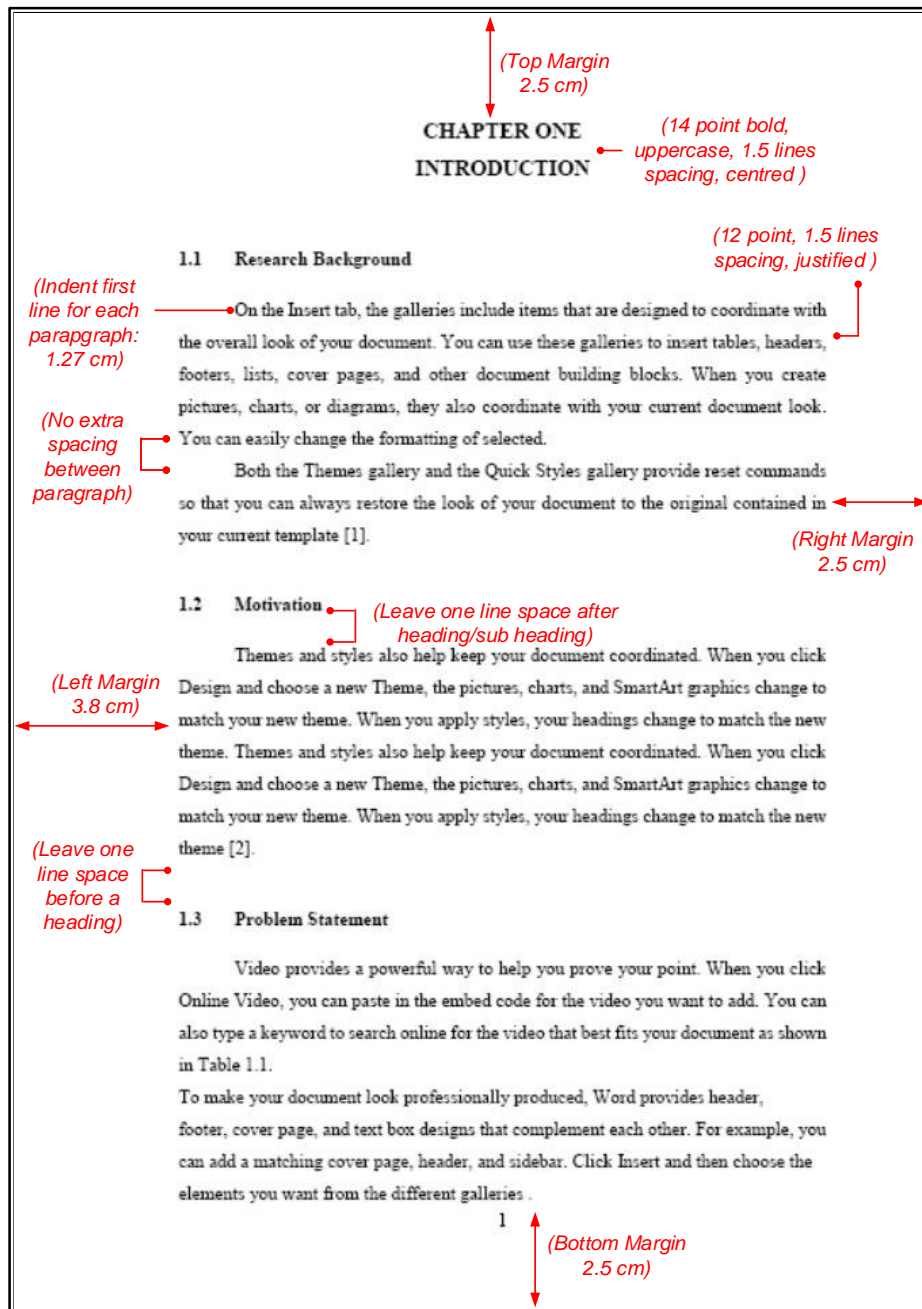
f) Alignment:

USAGE	ALIGNMENT
Chapter number	Centre
Headings and sub-headings	Left
Text	Justified

g) Page Numbering

Page numbers are located at the **bottom-centre** of each page. Roman format is used for Preface page (pages appear before Chapter One) and Arabic format is used for the rest of the report.

h) Example of First Page of each Chapter:



6.0 Content of Thesis

a) Abstract

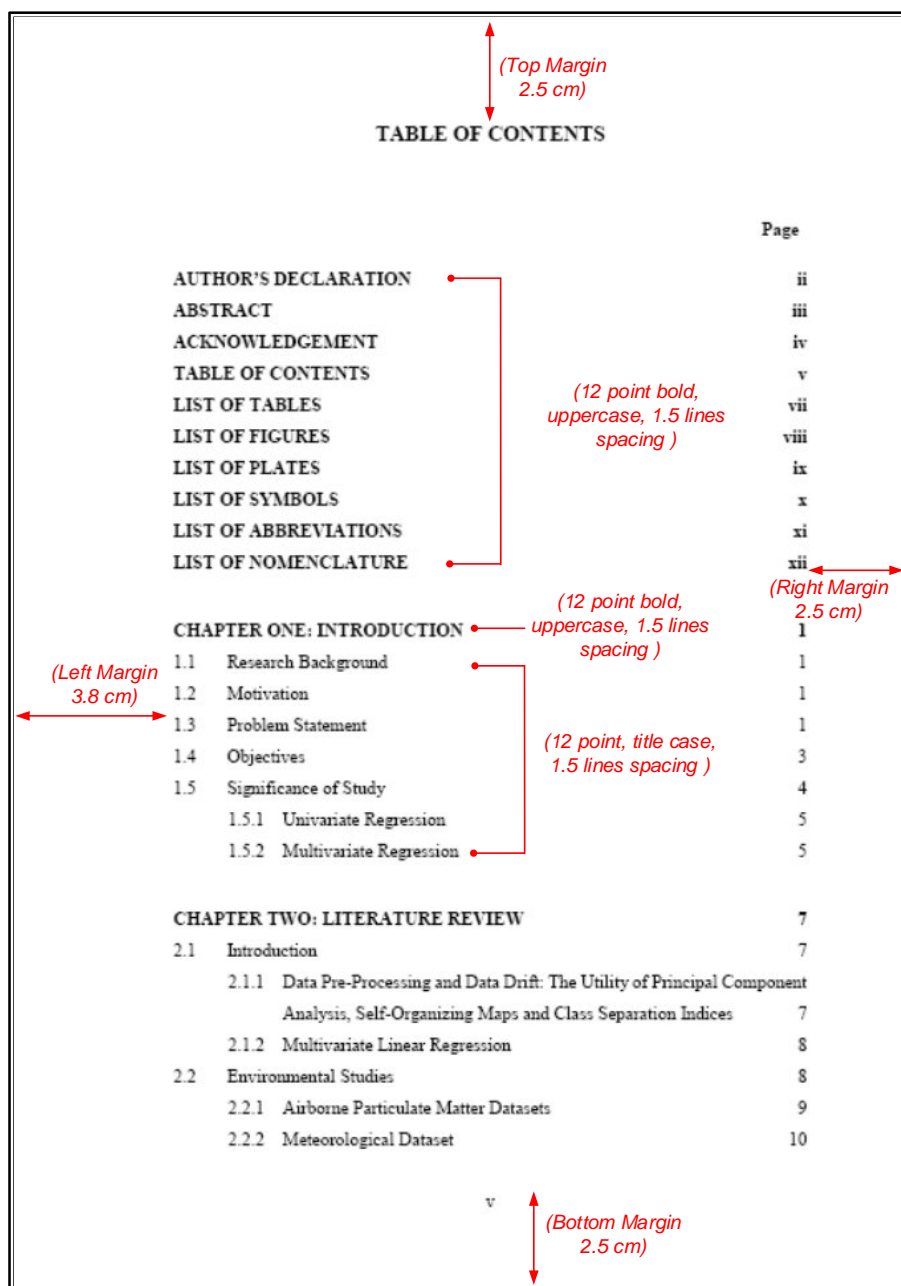
An Abstract is a synopsis of the thesis. It should describe an overview of the scientific studies presented in the thesis. It should be written, usually in ONE paragraph, concisely and attractive enough for the reader to continue and complete reading the full report. The abstract should give a brief statement of the research problems, aims of the research, methodologies used, key findings in the context of the whole study, and implications of the study. It should be typed in single spacing and should be with minimum of 200 words and up to ONLY one page. Do not exceed more than one page.

b) Acknowledgement

A brief statement of appreciation in recognition of any special assistance rendered to the student during the period of research should be included. It should be typed in single spacing and should not exceed one page in length. Here, authors are given the opportunities to express their appreciation of any important assistance or contribution received from relevant individuals or organizations. Limit to ONE (1) page

c) Table of Contents

This section should outline the different contents of the thesis and the respective page number. It also shows the breadth and scope of the chapters covered in the thesis. Titles of chapters, headings, and subheadings must be listed in the Table of Contents and must be worded exactly as they appear in the body of the report. All headings and sub-headings are numbered and to be justified to the left with page numbering on the right as shown below.



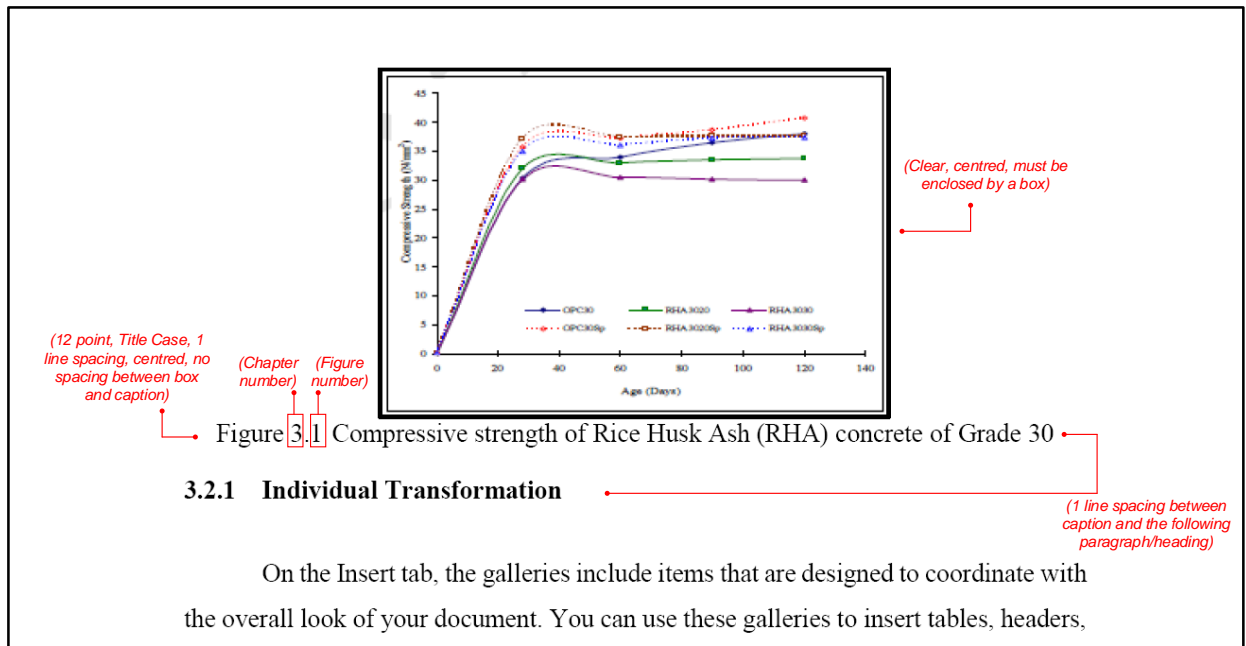
The diagram shows a Table of Contents page with various annotations. A red double-headed arrow at the top indicates a top margin of 2.5 cm. A red double-headed arrow at the bottom indicates a bottom margin of 2.5 cm. A red double-headed arrow on the left indicates a left margin of 3.8 cm. A red double-headed arrow on the right indicates a right margin of 2.5 cm. Red lines with dots at the end point to specific entries, with annotations: '(12 point bold, uppercase, 1.5 lines spacing)' for the main sections and '(12 point, title case, 1.5 lines spacing)' for sub-sections.

	Page
AUTHOR'S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF PLATES	ix
LIST OF SYMBOLS	x
LIST OF ABBREVIATIONS	xi
LIST OF NOMENCLATURE	xii
CHAPTER ONE: INTRODUCTION	1
1.1 Research Background	1
1.2 Motivation	1
1.3 Problem Statement	1
1.4 Objectives	3
1.5 Significance of Study	4
1.5.1 Univariate Regression	5
1.5.2 Multivariate Regression	5
CHAPTER TWO: LITERATURE REVIEW	7
2.1 Introduction	7
2.1.1 Data Pre-Processing and Data Drift: The Utility of Principal Component Analysis, Self-Organizing Maps and Class Separation Indices	7
2.1.2 Multivariate Linear Regression	8
2.2 Environmental Studies	8
2.2.1 Airborne Particulate Matter Datasets	9
2.2.2 Meteorological Dataset	10

d) List of Figures (Plates) and Figure (Plate) Caption

A list of figures outlined the schematic diagrams, drawings, graphs and flowcharts presented in the thesis. All figures should be numbered accordingly so that their chapters and sequence are known. The location of each figure is also described by specifying the page number that displays the figure.

The same format also applies to Plates. Plates are printed images and photos.



e) List of Tables and Table Caption

All tables should be numbered accordingly so that their chapters and sequence are known. The location of each table is also described by specifying the page number that displays the table.

(12 point, Title Case, 1 line spacing, left flushed, no spacing between caption and Table, Caption must be next line to Table numbering)

(Chapter number) (Figure number)

Table 2.5

The Statistical Information of APM Dataset

Batch	No of samples	Average per month	Percentage of LoD (Coarse APM)	Percentage of LoD (Fine APM)
1	100	8 samples	1.70%	6.48%
2	102	9 samples	9.29%	9.09%
3	176	9 samples	2.65%	4.34%

(Left and right lines must be removed, Font size minimum 9-point)

f) List of Symbols and Abbreviations

All abbreviations and symbols used in the thesis should be arranged in alphabetical order. Apart from that, Roman letters should be followed by Greek symbols.

g) Equations and Formulae

Every equation should be centred and numbered continuously, according to the chapters and in

parentheses “()” aligned to the right. Font size of 12. (Note: In MS Word, insert a table with two columns and one row to add a new equation to the thesis.

Use the word “Equation (1)” at the start of a sentence only, but in text just use the number (e.g., “in (1)”), unless describing an equation (e.g. “refer to Darlington equation (1)”).

Equation (4.1) describes the output voltage of the rectifier. By equating (4.1) and (4.4), it yields...

$V_o = IR$	(4.1)
------------	-------

(centered) *(Font size 12, right flushed)*

*NOTE: use “insert table” with 2 column 1 row in MS Word
Enclosed box should be removed*

h) Introduction

This section mainly consists of three parts. The first part should present an overview of the problem that has been the main focus of the work. Previous research conducted to overcome the problem should be explained briefly before describing the needs of your work to solve the problem. In short, this part should present the background of the study that motivates the author to do the proposed work. In the second part, the objectives of the work should be presented to outline the justifications for the work. Objectives should be specific and concise in describing the goals of the study. In addition, objectives should be easily measurable, i.e they can be quantified using the results of the study. Once the objectives have been established, the scope of study could be presented. This is the last part of this section that narrows down the breadth of the work conducted in the study. It specifies the boundaries of the work by explaining the limitations and constraints of the research.

i) Literature Review

In this section, the background of the area of research is presented before describing the previous and existing trends in solving the problem in the research area. It should also explain the limitation of previous research and how the proposed work could contribute to solve the problem better.

j) Methodology

In this section, the experimental approach is explained in a sequential and logical order (step-by-step approach). The flow chart may help to explain the methodology of the work. Past tense in the passive voice is usually used to describe the procedures and work in this section.

k) Results and Discussions

The results of the work should be presented in this section. The results may include tables, graphs, flow charts, drawings, schematic diagrams and photographs. However, all illustrations must be accompanied with written explanation to show the significance of the results obtained from the study. Any relationship, similarities and differences in the results should also be explained.

l) Conclusions

This is the last section of a thesis. It is aimed to review the different chapters in the thesis and provide a proper ending to the thesis. No new information should be introduced in this section. The conclusion may begin with the restatement of the objectives of the study followed by a review of the results to determine whether the objectives have been confirmed or rejected. Apart from that, the results are also evaluated based on the limitations of the study. In short, this section allows the author to evaluate his/her research.

m) Recommendations for Future Work

The recommendations for future work are usually related to the shortcomings of the work presented in the thesis. In this section, recommendations should be made to improve the results and overcome any limitation of the work presented in the thesis. However, it is also possible to include any recommendation outside the scope of the work presented in the thesis as an extension of the work done by the author.

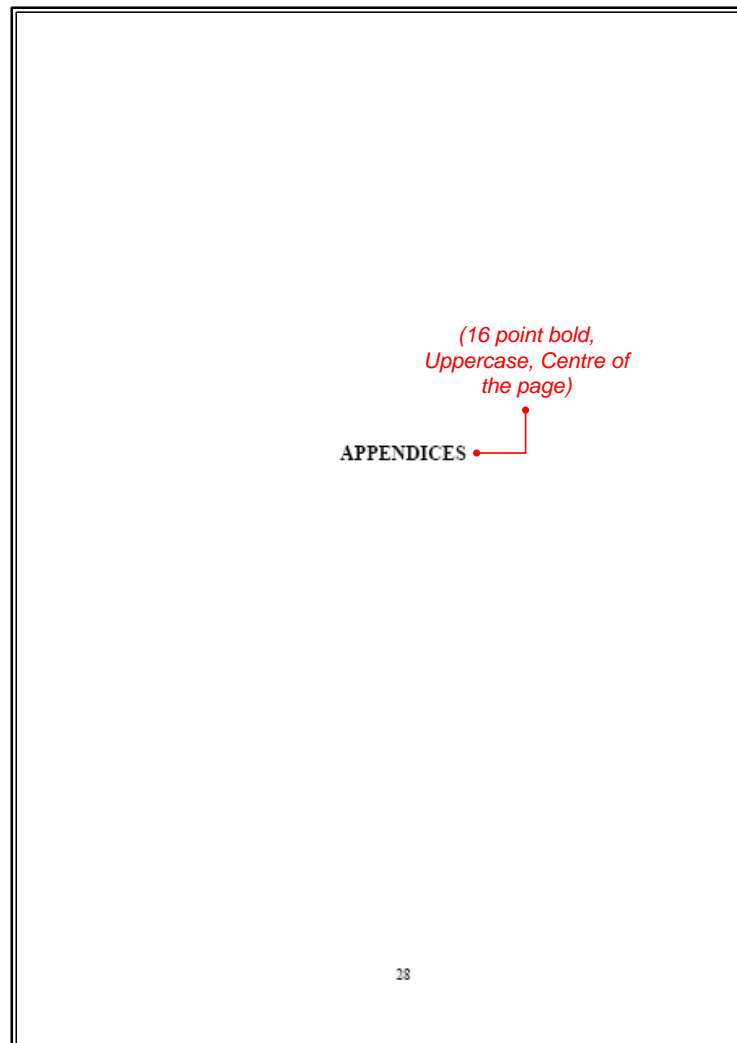
n) References

List only the references that have been referred in the thesis. The IEEE citation style should be adhered to when writing the references.

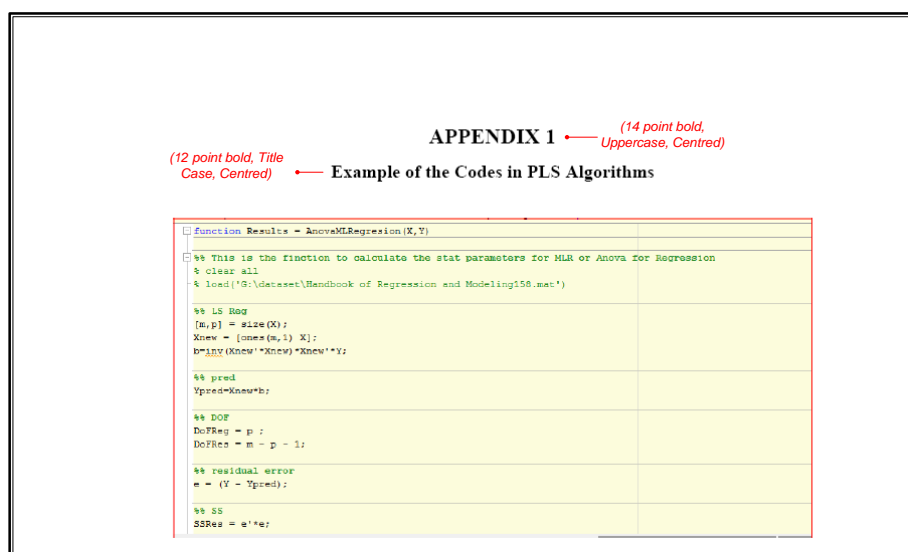
	REFERENCES	<i>(12 point bold, Uppercase, 1 line spacing between heading and references)</i>
<i>(12 point, 1.5 line spacing, IEEE citation style)</i>	[1] P. Zanchetta, P. W. Wheeler, J. C. Clare, M. Bland, L. Empringham, and D. Katsis, "Control design of a three-phase matrix-converter-based AC-AC mobile utility power supply," <i>IEEE Transactions on Industrial Electronics</i> , vol. 55, no. 1, pp. 209–217, 2008.	
	[2] H. Xie, L. Ångquist, and H. P. Nee, "Active power compensation of voltage source converters with energy storage capacitors," <i>2006 IEEE PES Power Systems Conference and Exposition, PSCE 2006 - Proceedings</i> , pp. 1012–1019, 2006.	

o) Appendices

Separator Page:



Appendices Heading:



7.0 Format for Cover of CD

The cover of the final CD that contains of FYP report, technical proposal and other related files should be in PURPLE:

