

# MAHENDRA ENGINEERING COLLEGE (Autonomous)

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# GUIDELINES FOR PREPARATION OF PROJECT PHASE I / II REPORT

FOR

B.E. / B.TECH.

# GUIDELINES FOR PREPARATION OF PROJECT PHASE I / II REPORT FOR B.E. / B.TECH.

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#### 1. GENERAL

While utmost attention should be made to the content of the project report, which is being submitted in partial fulfillment of the requirements of the respective degree, it is imperative that a standard format be prescribed. The guidelines to the preparation of B.E. / B.Tech. Programme project report are outlined below.

### 2. NUMBER OF COPIES TO BE SUBMITTED FOR EVALUATION

B.E. / B.Tech. Project Report: Four copies are to be submitted to the Department where the student is studying (one copy each to student, Supervisor, Department and Office of the Controller of Examinations).

#### **3.** SIZE OF PROJECT REPORT:

Number of pages of the report should be between 40 and 50 pages (with more emphasis on results and discussions) of typed matter reckoned from the first page of Chapter 1 to the last page.

#### 4. ARRANGEMENT OF CONTENTS OF THE REPORT:

The sequence in which the report material should be arranged and bound should be as follows.

- 1. Title page
- 2. Bona fide Certificate
- 3. Certificate of Project Approval
- 4. Abstract
- 5. Table of Contents
- 6. List of Tables
- 7. List of Figures
- 8. List of Symbols, Abbreviations and Nomenclature
- 9. Chapters
- 10. Appendices
- 11. References

Tables and Figures shall be introduced in the appropriate places.

#### 5. PAGE DIMENSIONS AND MARGIN:

The dimensions of the report should be 290mm x 205mm. Standard A4 size (297mm x 210mm) paper may be used for preparing the copies.

The final four copies of the project report (at the time of submission) should have the following page margins:

Top edge	:	30 mm
Bottom edge	:	25 mm
Left side	:	35 mm
Right side	:	20 mm

The report should be prepared on good quality white paper preferably not lower than 80 gsm. Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

#### 6. MANUSCRIPT PREPARATION:

The candidates shall submit a typed copy of the manuscript to the supervisor for the purpose of approval. The general text of report shall be typed in font style Times New Roman and font size 12. Same quality of paper should be used for the preparation of the entire report.

The headings of all items listed in section 4 should be typed in capital letters without punctuation and centered 50mm below the top of the page. The text should commence 4 spaces below this heading. The page numbers for all items from serial numbers 1 to 9 should be done using lower case Roman numerals and the pages thereafter should be numbered using Arabic numerals.

**61 Title Page** - A specimen copy of the Title page for report is given in Annexure I.

- 62 Bona fide Certificate and Certificate of Project Approval– The Bona fide Certificate and Certificate of Project Approval shall be submitted as per the format shown in Annexure II.
- **63 Abstract** Abstract should be one page synopsis of the project report typed double line spacing, Font Style Times New Roman and Font Size 14.
- **64 Table of contents** The table of contents should list all materials following it as well as any material which precedes it. The Title page, Bona fide Certificate and Certificate of Project Approval will not find a place among the items listed in the Table of Contents but the page numbers in lower case Roman letters are to be accounted for them. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the Table of Contents for report is given in Annexure III.
- **65** List of Table The list should use exactly the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head.
- **66** List of Figures The list should use exactly the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head.
- **67** List of Symbols, Abbreviations and Nomenclature One and a half spacing should be adopted for typing the matter under this head. Standard symbols, abbreviations etc., should be used.
- 68 Chapters The chapters may be broadly classified in to (i) Introductory Chapter (ii) Chapters developing the main theme of the project report (iii) Results, Discussion and Conclusion. The main text will be divided in to several chapters and each chapter may be further divided into several divisions and sub-divisions
  - Each chapter should be given an appropriate title.

- Tables and Figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
- Footnotes should be used sparingly. They should be typed single space and placed directly underneath in the very same page, which refers to the material they annotate.
- **69 Appendices** Appendices are provided to give supplementary information, which if included in the main text may serve as a distraction and cloud the central theme under discussion.
  - \* Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, *etc*.
  - \* Appendices, Tables and References appearing in Appendices should be numbered and referred to at appropriate places just as in the case of chapters.
  - \* Appendices shall carry the title of the work reported and the same title shall be made in the contents page also.
  - \* The list of publications made by students during the period of their project shall be brought in the Appendix titled, as List of Publications and the same shall be reported in the contents.
- **6.10 List of References** Any works of other researchers, if used either directly or indirectly, should be indicated at appropriate places in the report. The citation may assume any one of the following forms. The students' publications during the period of their project should not be included in the references.

#### **Examples of citation**

- (i) An improved algorithm has been adopted in literature (Tsychiya 1980)
- (ii) Jankins and Walts (1968) have dealt at length this principle.
- (iii) The problem of mechanical manipulators has been studied by Shin *et.al.*,
  (1984) and certain limitations of the method used, has been pointed out by Shin *et.al.*, (1984 a).

The listing should be typed 4 spaces below the heading "REFERENCES" in alphabetical order in single spacing left-justified. The reference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the year and other details. A typical illustrative list given below relates to the citation example quoted above.

#### **REFERENCES**

- Ariponnammal S. and Natarajan S. (1994), 'Transport Phenomena of Sm Se1-x Asx', Pramana – Journal of Physics, Vol. 42, No.5, pp.421-425.
- Barnard R.W. and Kellogg C. (1980) 'Applications of Convolution operators to Problems in univalent function theory', Michigan Mach. Journal, Vol. 27, pp.1-94.
- 3. Jankins G.M. and Walts D.G. (1968), Spectral Analysis and its Applications', Holder Day, Sanfrancisco.
- Shin K.G. and Mckay N.D. (1984), 'Open loop minimum time control of mechanical manipulations and its applications', Proc. Amer. Contr. Conf., San Diego, CA, pp.1231-1236.
- **6.11 Tables and Figures** By the word Table is meant tabulated numerical data in the body of the thesis as well as in the appendices. All other non-verbal material used in the body of the thesis and appendices such as charts, graphs, maps, photographs and diagrams may be designated as figures.
  - \* A table or figure including caption should be accommodated within the prescribed margin limits and should appear on the page, where the first reference is made as far as possible.
  - \* Tables and figures on half page or less in length may appear on the same page along with the text. However, they should be separated from the text both above and below by triple spacing.
  - \* Two or more small tables or figures may be grouped if necessary in a single page.
  - \* Photographs if any should be included as color print only. More than one photograph can be included in a page.
  - \* Samples of Fabric, Leather, *etc.*, if absolutely necessary may be attached evenly in a page and fixed/pasted suitably and should be placed in Appendix only.

### 7. TYPING INSTRUCTIONS

### 7.1 General

This section includes additional information for final typing of the report and information given earlier under 'Manuscript preparation' shall be referred. The impressions on the typed/duplicated/printed copies should be black in color. A subheading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page.

- The last word of any page should not be split using a hyphen.
- One and a half spacing should be used for typing the general text.
- The general text shall be typed in Font Style Times New Roman and Font Size 12.

Single spacing should be used for typing:

- (i) Long Tables
- (ii) Long quotations
- (iii) Foot notes
- (iv) Multilane captions
- (v) References

All quotations exceeding one line should be typed in an indented space, the indentation being 15mm from either margin.

#### 7.2 Chapters

The format for typing chapter headings, division headings and sub division headings shall be same as given in Table of Contents. The word CHAPTER without punctuation should be centered 50mm down from the top of the page. Two spaces below, the title of the chapter should be typed centrally in capital letters. The text should commence 4 spaces below this title, the first letter of the text starting 20mm, inside from the left hand margin.

The division and sub-division captions along with their numberings should be left-justified. The captions should start at 20 mm from left margin. The typed material directly below division or sub-division heading should commence 2 spaces below it and should be offset 20mm from the left hand margin. Within a division or sub-division, paragraphs are permitted. The paragraph should commence 3 spaces below the last line of the preceding paragraph or caption, the first letter in the paragraph being offset from the left hand margin by 20 mm.

#### 8. NUMBERING INSTRUCTIONS

#### 8.1 Page Numbering

All pages numbers (whether it be in Roman or Arabic numbers) should be

typed without punctuation on the page bottom centre. The preliminary pages of the thesis (such as Title page, Acknowledgement, Table of Contents etc.) should be numbered in lower case Roman numerals.

The title page will be numbered as (i) but this should not be typed, the page immediately following the title page shall be numbered (ii) and it should appear at the page bottom centre as already specified. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.

#### 8.2 Numbering of Chapters, Divisions and Sub-Divisions

The numbering of chapters, divisions and sub-divisions should be done using Arabic numerals only and further decimal notation should be used for numbering the divisions and sub-divisions within a chapter.

For example division / sub-division 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The title for the division/sub-division shall start at 20mm from the left margin, following the number assigned to it.

Every chapter beginning with the first chapter should be serially numbered using Arabic numerals. Appendices included should also be numbered in an identical manner starting with Appendix 1.

#### 8.3 Numbering of Tables and Figures

Tables and Figures appearing anywhere in the thesis should bear appropriate numbers. The rule for assigning such numbers is illustrated through an example. Thus, if a figure in Chapter 3 happens to be the fourth then assign 3.4 to that figure. Identical rules apply for tables except that the word Figure is replaced by the word Table.

If figures (or tables) appear in appendices then figure 3 in Appendix 2 will be designated as Figure A 2.3. If a table to be continued into the next page this may be done, but no line should be drawn underneath an unfinished table. A table continued into the next page should have a caption like, Table 2.1 (continued), placed centrally and underlined.

#### 8.4 Numbering of Equations

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering shall commence freshly for each Chapter or Appendix. Thus for example, an equation appearing in Chapter 2, if it happens to be the eighth equation in that Chapter should be numbered as 2.8, while referring to this equation in the body of the thesis it should be referred to as Equation (2.8).

# 9. BINDING SPECIFICATIONS

Project report submitted for B.E. /B.Tech., should be bound using flexible cover of thick white art paper. The cover should be printed in black color and the text for printing should be identical as prescribed for the title page.

MEC Logo (Logo size: Height 1.00" & Width 1.00")

### ANNEXURE I :

(A typical Specimen of Title Page)

<Font Style - Times New Roman - Bold>

# TITLE OF REPORT

<Font Size 18> <1.5 line spacing>

#### **PROJECT PHASE I REPORT**

<Font Size 14>

# Submitted by

<Font Size 14> <Italic>

# NAME OF THE CANDIDATE

<Font Size 16>

# in partial fulfillment for the award of the degree of

<Font Size 14> <1.5 line spacing>

# MASTER OF ENGINEERING IN NAME OF THE PROGRAMME

<Font Size 16>

# Department of \_\_\_\_\_ MAHENDRA ENGINEERING COLLEGE (Autonomous)

# Mahendhirapuri, Mallasamudram, Namakkal DT -637 503

<Font Size 16><1.5 line spacing>

# MONTH AND YEAR

AU,Chennai Logo (Logo size: Height 1.00" & Width 1.00")

# **ANNEXURE – II A** : (A typical Specimen of Bona fide Certificate )

<Font Style Times New Roman - Size - 16>

# MAHENDRA ENGINEERING COLLEGE (Autonomous)

# Mahendhirapuri, Mallasamudram, Namakkal DT -637 503

<Font Style Times New Roman - Size - 14>

# Department of \_\_\_\_\_

<Font Style Times New Roman – Size - 14>

# **BONA FIDE CERTIFICATE**

<Font Style Times New Roman - size -16>

<Font Style Times New Roman – size -14>

Certified that this project report "......TITLE OF THE PROJECT......"

is the bonafide work of ".....NAME OF THE CANDIDATE(S)....."

who carried out the project work under my supervision.

<<Signature of the Head of the Department>> SIGNATURE

<<Name>> HEAD OF THE DEPARTMENT

<<Department>>

<<Full address of the Dept & College >>

<<Signature of the Supervisor>> SIGNATURE

<<Name>>
SUPERVISOR

<<Academic Designation>>

<<Department>>

<<Full address of the Dept & College >>

<u>ANNEXURE – II B</u>: (A typical Specimen of Certificate of Project Approval) <Font Style Times New Roman >

# Font Style Times New Roman – Size - 16> MAHENDRA ENGINEERING COLLEGE (Autonomous)

Mahendhirapuri, Mallasamudram, Namakkal DT -637 503

<Font Style Times New Roman - Size - 14>

Department of \_\_\_\_\_

<Font Style Times New Roman – Size - 14>

# **CERTIFICATE OF PROJECT APPROVAL**

<Font Style Times New Roman – Size - 18>

<Font Style Times New Roman – Size - 13>

This is to certify that the Project report phase - I/ Project report phase -

II titled "Title of the Project" is the approved record of work done by Name

of the Candidate(s) in partial fulfillment for the award of the Degree of

\_ during the academic year 20xx- 20xx.

**SUPERVISOR** 

# HEAD OF THE DEPARTMENT

(Signature with seal)

Date:

Submitted for the end semester viva voce examination held on \_\_\_\_\_

# INTERNAL EXAMINER

EXTERNAL EXAMINER

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ANNEXURE III (A typical Specimen of Table of Contents) <Font Style Times New Roman, Font Size 14>

# **TABLE OF CONTENTS**

CHAPTER	NO.	TITLE	PAGE NO.
	ABSTRA	СТ	iii
LIST OF TABLES		xvi	
	LIST O	F FIGURES	xviii
	LIST OI	F SYMBOLS, ABBREVIATIONS	xxvii
1	INT	TRODUCTION	1
	1.1	GENERAL	1
	1.2		
		1.2.1 General	3
		1.2.2	5
	1.3		7
2	LIT	TERATURE REVIEW	9
	2.1	GENERAL	11
	2.2		13
		2.2.1	17
		2.2.2	19
		2.2.3	22
	2.3		25