

**P. R. Pote (Patil) Education & Welfare Trust's Group of Institutions
College of Engg. & Management, Amravati**

Guidelines on the Preparation of BE/ME Project Report

OBJECTIVE

A Project report is a documentation of a graduate student's project work - a record of the original work done by the student. It provides information about the student's research work to the future researchers. The Department is required to preserve a proper copy of the student's report for archiving and cataloging it in the Departmental Library, making it available to others for academic purpose. Standardization, readability, conformance to ethical norms, and durability are the four overriding criteria for an acceptable form of a report.

The objective of this document is to provide a set of guidelines that help a research student to prepare the report to satisfy the above-mentioned criteria.

FEATURES

1. The final copy of the project report has to contain all the modifications/corrections suggested by the examiners (including the members of the Viva-Voce Board) and is to be submitted after the student successfully defends the project in the viva-voce examination.
2. The report has to include a *declaration* by the student to the effect that he/she has not resorted to any unethical practice while carrying out the research work and preparing the report.
3. The *contribution* of the student must explicit in the Introduction chapter of the report.

PRODUCTION

Report Size

1. The maximum number of pages of the Report should be preferably between 50 -75 pages.

Paper Size

2. The standard A4 paper size of a report is 21.5 cm (8½ inch) wide and 28 cm (11 inches) long.
3. Oversized figures and tables, if any, should be reduced to fit within the size of the paper, but the reduction should not be so drastic as to impair clarity of the contents. One may also fold these pages to fit within the paper size.

Single-Sided Printing

Prefatory pages should be printed one side. From introduction onwards whole report should be printed on both side of the paper.

Non-Paper Material

1. Digital or magnetic materials, such as CDs and DVDs, may be included in the report. They have to be provided in a closed pocket attached to the inside of the back cover page of the report. It should be borne in mind that their formats may become obsolete due to rapid change in technology, making it impossible for the Library to guarantee their preservation and use.
2. All non-paper materials, as above, must have a label each indicating the name of the student, the date of submission, and the copyright notice.

Page Numbering

1. Cover page, Certificate, Acknowledgements, Abstract and Contents shall not contain any page number.
2. Page numbers for the prefacing materials of the report (List of abbreviations/ symbols, figures, tables, graphs, photographs) shall be in small Roman numerals and should be centered at the bottom of the pages.
3. Page numbers for the body of the report should be in Arabic numerals and should be right align at the bottom of the pages. The pagination should start with the first page of Chapter 1 and should continue throughout the text (including tables, figures, and appendices). Along with page numbers these pages should have **P. R. P. C. E. & M., Amravati** (Left align) in footer.

Binding

1. The report submitted for examination has to be hardbound, black color, golden screen printed or embossed.

Sample project hard binding content

Back	B.E. ME 2017-18 PRPCE&M	Cover page
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Sr No	Name of Department	Code
1	Civil Engg	CE
2	Computer Science Engg.	CS
3	Electrical & Electronics Engg	EE
4	Electronics Engg.	EC
5	Mechanical Engg.	ME
6	Information Technology	IT

FORMAT FOR THE REPORT

After the text of the report is written, it is to be formatted in an appropriate manner for printing. The following guidelines are provided to format the report for easy readability.

Font

1. Report heading – All Capital – 16 font size, bold
2. Chapter heading – All capital – 14 font size, bold
3. Subchapter – title case – 12 font size, bold
4. Sub-subchapter – first alphabet capital case – 12 font size, bold
5. Text pages should be in times new roman, 12 font size.
6. The minimum font size of materials within a table or a figure can be 8 point.
7. Title of figure/bar chart/ pie chart/photograph should be below it in title case, bold, center align
8. Title of table should be above it in title case, bold, left align to table.

Margins

1. A margin of 3.75 cm (1½ inch) is to be given on the left and right while on the other side it is to be 2.5 cm (1 inch). The text of the report, including headings, figures, tables, and notes, but excluding page numbers, must be accommodated within the page area.

Line Spacing

1. The line spacing in the main text must be 1.5. Single line spacing should be given for quotations, abstract, declaration, report approval, figure captions, table titles, figure legends, footnotes, and references.
2. Equations, tables, figures, and quotations should be set off from the main text with line spacing of 2.
3. Two consecutive paragraphs should be separated by line spacing of 2.

THE PREFATORY PAGES

Title of the Report

1. The title of the report should remain same as that given in the synopsis

Cover Page (cover of thesis)

1. Whole text should be in times new roman, font size 14 excluding for the title of thesis
2. See Sample Page 1 for details.

Title Page (First Inner Page)

The title page (first inner page) should be similar to the cover page.

Declaration by the Students

The student has to give a declaration to the effect that the data used for the work, the work depicted in the report, and the written material contained in the report are not copied from others and that due permission has been taken from, and due credit has been given to, the sources whenever they are used. (See Sample Page 3 for details).

Acknowledgements

1. It should be limited, preferably, to one page. (**Optional**)

Index/Contents

Chapter numbers, chapter names, section numbers, section headings, subsection numbers, and subsection headings, along with the corresponding page numbers, should be given in the Contents. (See Sample Page 4 for details).

List of Symbols

All the symbols used in the report are to be given here preferably alphabetically along with their explanations and units of measurement (if applicable).

Abstract

1. The abstract of the report should be limited to 200-300 words.
2. A list of keywords should follow the abstract.

BODY OF THE REPORT

The report should be written in British English, not a mixed mode. However, because of increasing acceptance of both styles and blurring of the distinction between the two, what is important is that consistency should be maintained throughout the text.

Note:

- Indian authors often use both styles without knowing whether the style they follow while writing is American or British. Also many American words are from Cambridge Dictionary. Further, there are subtle differences in the British and

American styles with regard to punctuation, abbreviations, quotations, etc., which are increasingly accepted by the proponents of both styles, and hence the distinction between them has blurred over the years.

- The chapters should have numbers in Arabic numerals and should be written as Chapter 1, Chapter 2, etc. This should be followed by the title of the chapter (e.g., Introduction, etc.). The font size should be 14-point, bold for the titles.
- Figures, tables, graphs should be positioned within the body of the text immediately after citation and should not be positioned separately.
- Units should be in SI format.

References

1. Author-date style of referencing is the preferred style for the project report of the Institute.
2. IEEE style to be followed.
3. Reference details must include the title of the source.

Sample List of References:

Journals:

- [1] D. Walters, G. Sheble, "Genetic Algorithm Solution for Economic Dispatch with Valve Point Loading", *IEEE Transactions on Power Systems*, vol.8, no.3, pp.19-24, 1993.

Books:

- [2] D.P. Kothari, J.S. Dhillon, *Power System Optimization*, Prentice Hall of India Private Limited, New Delhi, Edition2, pp. 214-221, 2004

Conferences:

- [3] E.Handschin, L.Muller, T.Nikodem, R.Palma, "Comparison of pricing methodologies for wheeling transactions in liberalised energy supply systems", *Proceedings of IEEE International Conference on Electric Utility Deregulation and Restructuring and Power Technologies*, pp. 528-531, 4-7 April 2000.

Reports:

- [4] "Report on the Performance of the State Power Utilities for the Years 2006-08 to 2008-09", Power Finance Corporation Limited (A Government of India undertaking), New Delhi, September 2010.

Project Report/Thesis:

- [5] James Daniel Weber, "Implementation of a Newton-Based Optimal Power Flow into a Power System Simulation Environment", A Thesis submitted to University of Illinois at Urbana-Champaign, pp. 1-102, 1997.

Website:

- [6] "Annual Report (2008-09)", Central Electricity Regulatory Commission, Government of India, New Delhi, 2010. (website <http://www.cercind.gov.in>) cited on 01/01/2017.

Sample List of publications:

Patent Submitted

- 1 S.B.Warkad, Dr. M.K. Khedkar, Dr. G. M. Dhole, "Intelligent Energy Metering System", submitted to The Controller of Patents, Mumbai, in collaboration with SSGM College of Engineering, Shegaon [Application No: 1966/MUM/2010; Filed dated 9th July 2010 - under review].

International Journals

- 1 S.B.Warkad, Dr. M.K. Khedkar, Dr. G. M. Dhole, "Optimal Electricity Transmission Pricing in a Restructured Electricity Market", *International Journal of Computer and Electrical Engineering (IJCEE)*, published by International Association of Computer Science and Information Technology Press (IACSIT), Singapore, Volume 1, No. 4, pp. 512-519, October, 2009.

National Journals

- 1 S.B.Warkad, Dr. M.K. Khedkar, Dr. G. M. Dhole, "Optimal Electricity Nodal Pricing in a Restructured Electricity Market", *Journal of The Institution of Engineers (India)* Volume 91, pp. 29-35, June 18, 2010.

International Conferences

- 1 S.B.Warkad, Dr. M.K. Khedkar, Dr. G. M. Dhole, "Computation and Economics of Nodal Price in a Restructured Electricity Market", International Conference on *Contours of Computing Technology, "ThinkQuest'2010"*, organized by BGIT, Mumbai, sponsored by Springer publication, IEEE Bombay section, Siemens and PCS, on 13-14th March 2010. ((ISBN: 978-81-8489-988-2)

National Conferences

- 1 S.B.Warkad, Dr. M.K. Khedkar, Dr. G. M. Dhole, “Electricity Spot Prices under Power Sector Restructuring: A Case study of Maharashtra State Electricity Transmission Company Limited (MSETCL)”, 23rd National Convention of Electrical Engineers & National Seminar on *Challenges in Electricity Sector under Deregulated Environment*, by The Institution of Engineers (India), Pune, on 23-24 November 2007.

Appendices

1. Each appendix should be identified as Appendix A, Appendix B, etc.
2. It should also have a title.
3. The appendices and their titles should be listed in the Contents.
4. Section and sub-section headings, equations, figures, and tables should be identified as A.1, A.2, etc., in accordance with their appearance in the appendix.

Copies:

All copies should be hard bound with the specified colour cover page (in no case spiral binding of thesis will be accepted).

The number of copies shall be one for each student, one copy for the Guide and one copy for department library.

Sample Page 1 (Cover/Title Page)

**“NAME OF PROJECT, TIMES NEW ROMAN, BOLD,
FONT SIZE 16, CENTERED”**

Submitted for the degree of Bachelor of Engineering in
MECHANICAL ENGINEERING

Submitted by

Name of Students

Under the Guidance of
Prof. X. Y. Z



DEPARTMENT OF MECHANICAL ENGINEERING
P. R. Pote (Patil) Education & Welfare Trust's Group of Institutions
College of Engineering & Management, Amravati.

2017-18

P. R. Pote (Patil) Education & Welfare Trust's Group of Institutions
College of Engineering & Management, Amravati.

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that project report entitled "Title of project" is
confided work and it is submitted to Sant Gadge Baba Amravati
University, Amravati.

Submitted By

Name of Students

In partial fulfillment of the requirements for the award of degree of
Bachelor of engineering in Mechanical Engineering during the academic
year of 2017-18 under the guidance of Prof. XYZ

Prof. X. Y. Z
(Guide)

Dr. S. G. Eale
(HoD)

Examiner

DECLARATION

I/We certify that the work contained in this report is original and has been done by us /me under the guidance of my supervisor(s).

- a. The work has not been submitted to any other Institute for any degree or diploma.
- b. I have followed the guidelines provided by the Institute in preparing the report.
- c. I have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- d. Whenever I have used materials (data, theoretical analysis, figures, and text) from other sources, I have given due credit to them by citing them in the text of the report and giving their details in the references.

Signature of the Student (s)

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LIST OF ABBREVIATIONS

Abbreviation	Full Form
Al ₂ O ₃	Aluminum oxide
CO	carbon monoxide
LHR	Low Heat Rejection
SiO ₂	Silicon dioxide
UHC	Unburned hydrocarbons
YSZ	<u>Yttria</u> -stabilized zirconia