

A project preliminaries report

GUIDELINES FOR PREPARATION OF PROJECT PRELIMINARIES REPORT

Submitted in partial fulfilment of the requirements for the award of the degree of

Bachelor of Technology

in

Mechanical Engineering

Submitted by

Name Student 1 U55ME555

Name Student 2 U66ME666

Name Student 3 U77ME777

Guided by

Name of Guide

Designation (Professor/Associate Professor /
Assistant Professor)



Year 20XX-XX

Department of Mechanical Engineering
Sardar Vallabhbhai National Institute of Technology
Surat – 395007, Gujarat, India

DECLARATION OF ACADEMIC INTEGRITY

A We, the undersigned, registered for the Bachelors' Degree at Department of Mechanical Engineering, Sardar Vallabhbhai National Institute of Technology, hereby declare that B. Tech. Final Year Project entitled **“Guidelines for Preparation of Project Preliminaries Report”** submitted by **Name of student 1 (U55ME555), Name of student 2 (U66ME666), and Name of student 3 (U77ME777)** is based on our own work and has been carried out under the guidance and supervision of **Name of guide**, Designation (Professor, Asso. Prof., Asst. Prof), Mechanical Engineering Department, Sardar Vallabhbhai National Institute of Technology, Surat. The data and information which we have used from various sources have been duly acknowledged. We declare that this written submission represents our ideas presented in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be a cause for disciplinary action by the Institute and can also evoke penal action from the source which have thus not been properly cited or from whom proper permission has not been taken when needed. We further declare that this work has not been previously submitted by us to any other university/institute for the award of any degree or diploma or for any other purpose.

Date: DD/MM/YYYY

Place: SVNIT, Surat

Signatures

Name of student 1 U55ME555

Name of student 2 U66ME666

Name of student 3 U77ME777

ACKNOWLEDGEMENT

Date: DD/MM/YYYY

Place: SVNIT, Surat

Signatures

Name of student 1

U55ME555

Name of student 2

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CERTIFICATE FROM THE GUIDE

This is to certify that the Project report entitled “**Guidelines for Preparation of Project Report**” submitted by **Name of student 1 (U55ME555)**, **Name of student 2 (U66ME666)**, and **Name of student 3 (U77ME777)** in partial fulfilment for the award of the degree in Bachelor of Technology in Mechanical Engineering during the academic year 2021-22, of the Sardar Vallabhbhai National Institute of Technology, Surat is a record of their own work carried out under my supervision and guidance. The matter embodied in the report has not been submitted to any other university or institute for award of any degree or diploma.

Date: DD/MM/YYYY

Place: SVNIT, Surat

Guide

Name of guide

Head, DoME

Name of Head, DoME



Department of Mechanical Engineering
Sardar Vallabhbhai National Institute of Technology
Surat – 395007, Gujarat, India

EXAMINERS' APPROVAL CERTIFICATE

This is to certify that the Project report entitled “**Guidelines for Preparation of Project Preliminaries Report**” submitted by **Name of student 1 (U55ME555), Name of student 2 (U66ME666), and Name of student 3 (U77ME777)** in partial fulfillment for the award of the degree in Bachelor of Technology in Mechanical Engineering during the academic year 20XX-XX, of the Sardar Vallabhbhai National Institute of Technology, Surat is hereby approved.

Date: DD/MM/YYYY

Place: SVNIT, Surat

Examiners:

1. Name of Examiner 1
2. Name of Examiner 2
3. Name of Examiner 3

Signatures

Chairperson:

1. Name of Chairperson



Department of Mechanical Engineering
Sardar Vallabhbhai National Institute of Technology
Surat – 395007, Gujarat, India

ABSTRACT

The minimum 300 words abstract shall highlight the important features of the report. The abstract in the thesis shall have two parts, namely layout of the thesis giving brief chapter wise description of the complete work and the key words. The overview of the complete report must be reflected in the abstract. At the end, minimum five, most relevant key words should be written. The title “ABSTRACT” should be written in bold capital letter with font size 16 at the top of the page, with center alignment. The main content should start after one blank line spacing from the title. Abstract should be preferably of one page. Times New Roman 12pt fonts with line spacing 1.5 must be used while preparation of the abstract. The keywords must start from the new line after the overview of the complete report, keeping one blank line in between. The word “keywords” should be written with bold 12 point letters. The first letter of each keyword must be a capital letter. The detailed discussion about the page setup, paragraph format and binding guidelines are given in Chapter 1.

Keywords: Guidelines, Project report, Report template, References, Conclusions.

Table of Contents

	Page
Declaration of Academic Integrity	ii
Acknowledgment	iii
Certificate from the supervisor	iv
Examiners' approval certificate	v
Abstract	vi
List of Figures	ix
List of Tables	xi
Nomenclatures	xiii
 Chapter 1: Introduction	 1
1.1 Motivation	1
1.1.1 Global status of the selected theme	1
1.1.2 The current installations of the selected theme - globally	3
1.1.3 Status of the selected theme development in India	4
1.2 Comparison	6
1.3 Classification	9
 Appendix	 262
References	273
List of Publications	290

List of figures

Fig. No.	Description	Page No.
1.1	Caption of Fig. 1.1	XX
1.2	Original reference must be cited if figure is used from other source	XX
1.3	First page of List of Figures must started from odd page (right hand page)	XX

List of Tables

Table No.	Description	Page No.
1.1	Caption of Table 1.1	XX
2.1	Original reference must be cited if data are used from other source	XX
3.1	First page of List of Tables must started from odd page (right hand page)	XX

Nomenclatures

Symbol	Description	unit
A	Description of the symbol	m^2
Bi	It should be arranged in alphabetical order. Different symbols for same quantity should be avoided	Nm
C_x	Symbols and its units must be written in italic fonts	W
D_{ij}	First page of the nomenclatures must started from odd page (right hand page)	-
σ_T	Tensile Stress	N/mm^2

Abbreviations

Symbol	Meaning
<i>DoME</i>	Department of Mechanical Engineering
<i>SVNIT</i>	Sardar Vallabhbhai National Institute of Technology
<i>XYZ</i>	The long sufficient description must be written (along with the short form in bracket) when it appears first time in the Chapter.
<i>ABC</i>	Page numbers must be marked in Roman form till first chapter begins
<i>PQR</i>	Short forms must start from odd page (right hand page)

Chapter 1

Introduction

Preamble

While utmost attention must be paid to the content of the project report, which is being submitted in partial fulfillment of the requirements of the degree, it is imperative that a standard format be prescribed.

1.1 Organization of the report

The thesis shall be presented in a number of chapters, starting with Introduction and ending with Summary and Conclusions. Each of the chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into sections, sub-sections and sub-sub-section so as to present the content discretely and with due emphasis.

1.1.2 Introduction

The title of Chapter 1 shall be Introduction. It shall justify and highlight the problem posed, motivation, define the topic and explain the scope of the work presented in the report. It may also highlight the significant contributions from the investigation.

1.1.3 Review of Literature

This shall normally form Chapter 2 and shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation. The extent and

The similarity of the report should preferably less than 15%, however never more than 20%.

The similarity report must be attached at the end of project preliminaries / project report

The chapter should clearly have concluded with the preliminary research gap found and specific aim decided for the project.

1.1.4 Report on the present investigation

The reporting on the investigation shall be presented in one or more chapters with appropriate chapter titles.

Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted. Important derivations/formulae and obtained key results in tabular or graphical form should normally be presented in the text of these chapters. Representative data in table and figures may, however, be included in appropriate chapters. Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages. Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbers flushed to the right.

Each chapter should follow with a comprehensive results and discussion topic. It shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

The extensive and long treatments, copious details and tedious information, detailed results in tabular and graphical forms may be presented in Appendices.

1.1.5 Summary and Conclusions

This will be the final chapter of the thesis. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated

1.1.6 Appendix

Detailed information, lengthy derivations, raw experimental observations etc. are to be presented in the separate appendices, which shall be numbered in Roman Capitals (e.g., “Appendix IV”). Since reference can be drawn to published/unpublished literature in the appendices these should precede the “Literature Cited” section. This may also be included in the contents, but it should not mark with any chapter number.

1.1.7 Publications by the candidates

Articles, technical notes etc. on the topic of the project published by the candidates may be separately listed after the Appendixes. The published articles and article under review must be marked separately. The articles under preparation need not be marked in this chapter. This may also be included in the contents, but it should not mark with any chapter number.

1.1.8 References or Literature cited

This should follow the Appendixes, if any, otherwise the Summary and Conclusions chapter. The candidates shall follow the style of citation and style of listing in one of the standard journals in the subject area consistently throughout his/her thesis. However, the names of all the authors along with their initials and the full title of the article/monogram/book etc. have to be given in addition to the journals/publishers, volume, number, pages(s) and year of publication. Alternatively, the Harvard style, which can be adopted by using Google scholar or Mendeley directly. This may also be included in the contents, but it should not mark with any chapter number.

1.2 Thesis Format

1.2.1 Paper

(i) Quality

The thesis shall be printed/Xeroxed on white bond paper, whiteness 95% or above, weight 70 gram or more per square meter.

(ii) Size

The size of the paper shall be standard A 4; height 29.7 cm, width 21.0 cm.

(iii) Type -Setting, Text Processing and Printing

The text shall be printed employing LaserJet or Inkjet printer, the text having been processed using a standard text processor, like MS Word or Latex editor. The standard font shall be Times New Roman of 12 pts with 1.5-line spacing.

(iv) Page format

The details of the written area of the Printed Sheets is given in table 1.1.

Table 1.1 Page formatting of the Printed sheet

Sr. No.	Details	Size
1	Top margin	1.5 cm
2	Bottom margin	2.21 cm
3	Inside	3.0 cm
4	Outside	2.0 cm
5	Header	1.27 cm
6	Footer	1.27 cm

Left and Right Margins: The candidates shall have the options of single- or double-sided printing.

Single sided print: odd number page, left margin 30mm, right margin 20 mm

Double sided print: odd number page, left margin 30mm, right margin 20 mm

even numbered page, left margin 20mm, right margin 30mm.

(v) Pagination

Page numbering in the text of the thesis shall be Hindu Arabic numerals at the center of the footer. But when the candidates opts for header style the page number shall appear at the right and left top corner for the odd and even number pages, respectively. Page number “1” for the first page of the Introduction chapter shall not appear in print, only the second page will bear the number “2”.

The subsequent chapters shall begin on a fresh page (fresh odd number page in case of double-sided printing). When header style is chosen the first page of each chapter will not have the header and the page number shall be printed at the center of the footer.

Pagination for pages before the Introduction chapter shall be in lower case Roman numerals, e.g., “iv”.

(vi) Header

When the header style is chosen, the header can have the Chapter number and title both in italic fonts, preferably with the bottom continuous line to indicate the separation with the main text.

(vii) Paragraph

Vertical space between paragraphs shall be about 12pt spacing or can start with one blank line in between the two paragraphs. A paragraph should normally comprise more than one line. A single line of a paragraph shall not be left at the top or bottom of a page (that is, no windows or orphans should be left).

1.3 Chapter and Section Format

1.3.1 Chapter

Each chapter shall begin on a fresh page (odd number page in case of double-sided printing) with an additional top margin of approximately 7.5cm. Chapter number (in Hindu Arabic) and title shall be printed at the center of the line in 6mm font size (18pt) in bold face using first font of Each Word Capitalized or all words UPPERCASE. A vertical gap of about 25pt shall be left between the Chapter number and Chapter title lines and between chapter title line and the first paragraph.

1.3.2 Sections and Sub-sections

A chapter can be divided into sections, subsections and sub-subsections so as to present different concepts separately. Sections and sub-sections can be numbered using decimal points, e.g., 2.2 for the second section in Chapter 2 and 2.3.4 for the fourth Sub- section in third Section of Chapter 2. Chapters, Sections and Sub-sections shall be included in the contents with page numbers flushed to the right. Further subsections need not be numbered or included in the contents.

The Section and Subsection titles along with their numbers in 5 and 4 mm (16 and 14 pt) fonts, respectively, in bold face shall be flushed to the left (not centered) with 15 pt space above and below these lines.

In further subdivisions font size of 12 pt with bold and italic fonts may be used for the titles flushed left. These shall not feature in the contents.

1.3.2 Table / Figure Format

As far as possible tables and figures should be presented in portrait style. Small size table and figures (less than half of writing area of a page) should be incorporated within the text, while larger ones may be presented on separate pages. Table and figures shall be numbered chapter-wise. For example, the fourth figure in chapter 5 will be represented with the number Figure 5.4 or Fig 5.4.

Table number and title will be placed above the table while the figure number and caption will be located below the figure, with bold letters and center alignment. Reference, if any, for Table and Figures reproduced from elsewhere shall be cited in the last and separate line in the table and figure caption, e.g. (Patel and Prabhu [12]).

1.4 Auxiliary Format

1.4.1 Binding

For project preliminaries report: spiral bound only

The evaluation copies of the report may be spiral bound or soft bound. The examiner's approval certificate should be signed after successful completion of the viva voice examination. The final hard bound copies to be submitted after the viva voice examination after making the necessary changes suggested by the team of the examination panel. The suggested color of the outer cover of the final submission of the thesis/dissertation/report is given in the Table 1.2.

Table 1.2 Suggested bindings and colors for outer cover

1	project preliminaries report	spiral bound
2	Project Report Final	Brown & hard bound

A.Y. 20XX-XX

1.4.2 Front Covers

The front covers shall contain the following details:

Full title of thesis in 22 pt size font properly centered and positioned at the top. Full name of the candidates with Admission number followed by the name of the supervisor in 16 point's size fonts properly centered at the middle of the page.

A 4.5 cm dia replica of the Institute emblem followed by the year of the submission, name of department and the name of the institute each in a separate line and properly centered and located at the bottom of page.

All lettering shall be embossed in gold. The degree, the name of the candidates and the year of submission shall also be embossed on the bound (side) in gold.

1.4.2 Blank sheets

In addition to the white sheets (binding requirement) two white sheets shall be put at the beginning and the end of the thesis.

1.4.3 Title sheet

This shall be the first printed page of the thesis and shall contain the submission statement: the project report submitted in partial fulfillment of the requirements of the degree, B.Tech the name and roll no. of the candidates, name(s) of the Supervisor and Co-supervisor (s) (if any), Department, Institute and year of submission.

Sample copy of the 'Title Sheet' is appended at the beginning of the report

1.4.4 Dedication Sheet

A declaration of Academic honesty and integrity is required to be included along with every thesis/dissertation/report after the title sheet. The format of this declaration is given in at the beginning of the report attached.

1.4.4 Acknowledgment

If the candidates desire, he/they can acknowledge the person/s, department and/or firm for their efforts and help. The acknowledgment must be signed by the candidates at the bottom of the page.

1.4.5 Certificate

The certificate from the guide(s)/ supervisor(s) should be attached after the acknowledgement page. It must be approved by guide(s)/ supervisor(s) before final submission of thesis/dissertation/report. A 4.5 cm dia replica of the Institute emblem followed by the Year of the submission, name of department and the name of the Institute each in a separate line and properly centered and located at the bottom of page.

1.4.6 Examiner's Approval Sheet

The Approval Sheets are to be included in the hard bound copies which are to be submitted after the successful Ph.D. viva voce examination. The terms, thesis approval (PhD), Dissertation Approval (M.Tech) or Report Approval (B. Tech. project) can be used appropriately. A sample copy of the Approval Sheet is appended at the beginning of the report.

1.4.6 Abstract

The abstract, preferably of one page, shall highlight the important features of the thesis/dissertation/report. The Abstract in the thesis, however, shall have two more parts, namely, the layout of the thesis giving a brief chapter- wise description of the work and the key words.

1.4.7 Contents

The contents shall follow the Abstract and shall enlist the titles of the chapters, section and sub-section using decimal notation, as in the text, with corresponding page number against them, flushed to the right.

1.4.8 List of Figures and Tables

Two separate lists of Figure captions and Table titles along with their numbers and corresponding page numbers against them shall follow the Contents.

1.4.9 Abbreviation Notation and Nomenclature

A complete and comprehensive list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided after the list of tables and figures. (As far as possible, generally accepted symbols and notation should be used). It is preferred to mention Abbreviation Notation and Nomenclatures, separately and in alphabetical order.

Auxiliary page from dedication (if any) to abbreviations shall be numbered using Roman numerals in lower case, while the text starting from the Introduction shall be in Hindu Arabic. (The first pages in the both the cases shall not bear a page number).

References

1. Surname, Initial letters of author 1., Surname, Initial letters of author 2., year of publication. Title of the article, Harvard style can be used for reference. *Name of the journal*, *Volume*, page numbers.
2. Patel, V., Eldho, T.I. and Prabhu, S.V., 2018. Theoretical study on the prediction of the hydrodynamic performance of a Savonius turbine based on stagnation pressure and impulse momentum principle. *Energy conversion and management*, 168, pp.545-563.