Academic (UG) Section
DELHI TECHNOLOGICAL UNIVERSITY

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Shahbad Daulatpur, Bawana Road, Delhi-110042

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Guidelines for Project Report Preparation B. Tech./ M. Tech. Dissertation.

This document provides guidelines B.Tech./M. Tech. project report preparation. All B. Tech and M. Tech students are required to adhere to the guidelines while preparing the project reports.

1. General:

The manual is intended to provide broad guidelines to the B.Tech. Students in the preparation of the project dissertation. In general, the dissertation shall report, in an organized and scholarly fashion, an account of original work of the research student leading to the discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware oriented etc) and demonstrating a quality as to make a definite contribution to the advancement of knowledge and the student's ability to undertake sustained research and present the findings in an appropriate manner with actual accomplishments of the work plainly stated and honestly appraised.

2. Number of Copies to be Submitted for Evaluation and Plagiarism Report:

M. Tech. Dissertation: Two copies in spiral binding, with similarity index not exceeding 20%, are to be submitted to the University (in the Department) along with one CD (Soft copy). However, the student is required to submit the hard bound copy of the dissertation after the approval of examiner/viva voce examination. The soft copy of report will be examined by library authority for plagiarism and similarity index report generation.

B. Tech. project Dissertation: Two copies with similarity index not exceeding 20%, are to be submitted to the University (in the Department) along with one CD (Soft copy). The soft copy of report will be examined at department level for plagiarism and similarity index report generation.

3. Maximum No. pages in Dissertation/Project Report:

The size of thesis should not exceed 150 Pages of typed matter reckoned from the first page of Chapter 1 to the last page of the Appendix.

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4. Arrangement of Contents of Dissertation/Project Report:

The sequence in which the dissertation/project report material should be arranged and bound should be as follows:

1. Cover Page & Title Page
2. Candidate's Declaration
3. Certificate
4. Abstract
5. Acknowledgement
6. Contents
7. List of Tables
8. List of Figures
9. List of Symbols, Abbreviations and Nomenclature
10. Chapters 1, 2
11. Appendices
12. References
13. List of Publications of the candidate's work (if any)

The Tables and Figures shall be introduced at the appropriate places.

5. Page Dimensions and Margin:

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

The Dissertation/project report (at the time of submission) should have the following page margins:

Top edge	:	25 mm
Bottom edge	:	25 mm
Left side	:	35 to 40 mm
Right side	:	25 mm

The dissertation/project report should be prepared on good quality white paper preferably bond paper no 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.

The students will supply a typed copy of the dissertation/project report to the supervisor for the purpose of approval. In the preparation of the manuscript, care should be taken to ensure that all textual matter is in printed form to the extent possible in the same format as may be required for the final report.

The headings of all the items 2 to 13 listed in section 4 should be typed in capital letter without punctuation and centered 50 mm below the top of the page. The text should commence 4 spaces below this heading. The page numbering for all items 1 to 9 should be done using lower case Roman numerals and the numbers

should be placed at the bottom-centre and the pages thereafter should be numbered using Arabic numerals at the bottom-centre.

6.1 **Cover Page & Title Page:** A specimen copy of the Cover page & Title page for dissertation/project report is enclosed for reference.

6.2 **Candidate's Declaration and Certificate-** The Candidate's declaration and Certificate shall be in double line spacing using Font Style Times New Roman Font Size 12, as per the enclosed format.

The certificate shall carry the supervisor's signature ands shall be followed by the supervisor's name, academic designation (not any other responsibilities of administrative nature), department and full address of the institution. The term **'SUPERVISOR'** must be typed in capital letters between the supervisor's name and academic designation.

6.3 **Abstract-** Abstract should be an essay type of narration not exceeding two pages outlining the work presented, the methodology used fro tacking it and a summary of the findings, when typed double line spacing, font Style Times New Roman and Font Size 12.

6.4 **Acknowledgement-** The Acknowledgement shall be brief and should not exceed one page when typed in double spacing. The student's signature shall be made at the bottom end above his/her name typed in capitals.

6.5 **Table of contents-** The table of contents should list all material following it as well as any material which precedes it. The sub headings may be up to three level like 2.1.1.1. One and a half spacing should be adopted for typing the matter. The sample copy is also attached for reference.

6.6 **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.

6.7 **List of Figures-** 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.

6.8 **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.

6.9 **Chapters-** The chapters may be broadly divided into 3 parts (i) Introductory chapter, (ii) Chapters developing the main theme of the work, (iii) Results, Discussion and Conclusion.

The main text may be divided into chapters and each chapter may be further divided into several divisions and sub-divisions.

- Each chapter should be given an appropriate title.

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- Tables and figures in a chapter should be typed single space and placed directly underneath in the very same page, which refers to the material they annotate.
- 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.

6.10 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 the students (if any) during the work shall be brought in the Appendix titled, as List of Publications and the same shall be reported in the contents. The author can refer the publications mentioned in the Appendix in the text of the dissertation/report, by mentioning his/her name followed by Appendix number and the year of publication, in brackets.

6.11 List of Reference- Any work of other researchers, if used either directly or indirectly, the origin of the material thus referred to at appropriate places in the thesis should be indicated. A paper, a monograph or a book may be designed by the name of the first author followed by the year of publication, placed inside brackets at the appropriate places in the thesis should be indicated. A paper, a monograph or a book may be inside brackets at the appropriate place of reference. The citation may assume any one of the following forms.

The author publications during the period of research not be included in the references and can be separately mentioned as in 6.10.

Referencing a Figure or Table within dissertation/project report:

When referencing your figures and tables within your dissertation/project report, use the abbreviation "Fig." even at the beginning of a sentence. Do not abbreviate "Table." Tables should be numbered with Roman Numerals.

References need not be cited in text. When they are, they appear on the line, in square brackets, inside the punctuation. Multiple references are each numbered with separate brackets. When citing a section in a book, please give the relevant page numbers. In text, refer simply to the reference number. Do not use "Ref." or "reference" except at the beginning of a sentence: "Reference [3] shows ... .".

Reference numbers are set flush left and form a column of their own, hanging out beyond the body of the reference. The reference numbers are on the line, enclosed in square brackets. In all references, the given name of the author or editor is abbreviated to the initial only and precedes the last name. When citing

IEEE transactions, provide the issue number, page range, volume number, year, and/or month if available. When referencing a patent, provide the day and the month of issue, or application. References may not include all information; please obtain and include relevant information. Do not combine references. There must be only one reference with each number. If there is a URL included with the print reference, it can be included at the end of the reference.

Other than books, capitalize only the first word in a brief title, except for proper nouns and element symbols. For briefs published in translation journals, please give the English citation first, followed by the original foreign-language citation See the end of this document for formats and examples of common references. For a complete discussion of references and their formats, see the IEEE style manual at www.ieee.org/authortools.

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 chronological order. A typical illustrative list given relates to the citation examples quoted above.

References

The references should be as per IEEE template.

[1]. Q. Mei, M. Shan, L. Liu and J. M. Guerrero, "A novel improved variable step-size incremental-resistance MPPT method for PV systems," IEEE Trans. Ind. Elect., vol. 58, no. 6, pp. 2427-2434, June 2011.

[2]. L. Bangyin, D. Shanxu, L. Fei and X. Pengwei, "Analysis and improvement of maximum power point tracking algorithm based on incremental conductance method for photovoltaic array," in *Proc. 7th Int. Conf. Power Elect. Drive Systems*, 27-30 Nov. 2007, pp. 637-641.

[3]. M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.

7.Typing Instructions

7.1 General

This section includes additional information for final typing of the dissertation/project report. Some information given earlier under 'Manuscript preparation shall also be referred.

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.

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7.2 Chapters

The format for typing Chapter headings Divisions headings and sub-division headings are explained through the following illustrative examples.

Chapter headings	:	CHAPTER 1 INTRODUCTION
Division heading	:	1.1 ORGANIZATION OF DISSERTATION/THESIS
Sub-division heading	:	1.1.2 Literature review.

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 typed material directly below division or sub-division headings 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. Even paragraph should commerce 3 spaces below the last line of the preceding paragraph, the first letter in the paragraph being offset from the left hand margin by 20mm.

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 upper right hand corner 20mm from top with the last digit in line with the right hand margin. The preliminary pages of the dissertation/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 top right hand corner as already specified. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.

8.2 Numbering of Chapters, Division and Sub-divisions.

The numbering of Chapters, division 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 examples sub-division 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The caption for the sub-division should immediately follow 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 dissertation/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 on line should be drawn underneath an unfinished table. The top line of table continued into the next page should, for example read Table 2.1 (continued) placed centrally and underlined.
Further, tables and figures may be centre justified. Table captioning should be placed above the Table whereas the figure captioning should be placed below the figure.

8.4 Numbering of Equations

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering commencing a fresh 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 (2.8) thus:

$$f_2 = k\left[\frac{V_1}{V_1V_2 + V_3}\right]^2 \qquad (4.4)$$

While referring to this equation in the body of the dissertation/thesis it should be referred to as Equation (4.4).

9. Binding Specifications

B. Tech:

The cover of the Thesis shall be navy blue in color and printed in silvery-white for B. Tech. students. The text of the cover page and the first inner page will be as per the format enclosed for reference.

M. Tech:

For M. Tech. students two copies of spiral binding are required initially along with one soft copy in CD. However, the candidates are required to submit two hard bound copies of black color and printed in golden after the successful completion of viva-voce examination. If any changes are suggested by examiner then necessary changes must be incorporated in final dissertation.

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(A typical Specimen of Table of Contents)
<Font Style Times New Roman- size-14>

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M. Tech (Name of Discipline) [Your Name] 2018

TITLE OF DISSERTATION

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE
OF

MASTER OF TECHNOLOGY
IN
[NAME OF DISCIPLINE]

Submitted by:

[Your Name]

(Roll No. ....)

Under the supervision of

[NAME OF THE SUPERVISOR]

NAME OF THE DEPARTMENT
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)
Bawana Road, Delhi-110042

MAY, 2018

Rlandy

B. Tech (Name of Discipline) [Your Name] 2018

TITLE OF DISSERTATION

A PROJECT REPORT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE
OF

BACHELOR OF TECHNOLOGY
IN
[NAME OF DISCIPLINE]

Submitted by:

[Your Name]

(Roll No. ....)

Under the supervision of

[NAME OF THE SUPERVISOR]

NAME OF THE DEPARTMENT
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)
Bawana Road, Delhi-110042

MAY, 2018

DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)
Bawana Road, Delhi-110042

CANDIDATE'S DECLARATION

I/We, (Name of Candidate(s)), Roll No(s). xxxxxx student(s) of M.Tech/ B. Tech. (Name of Discipline), hereby declare that the project Dissertation titled "Title of Major Project" which is submitted by me/us to the Department of ----------, Delhi Technological University, Delhi in partial fulfillment of the requirement for the award of the degree of Master of Technology/Bachelor of Technology, is original and not copied from any source without proper citation. This work has not previously formed the basis for the award of any Degree, Diploma Associateship, Fellowship or other similar title or recognition.

Place: Delhi

Date:

(NAME OF STUDENT)

Rlandy

NAME OF THE DEPARTMENT
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)
Bawana Road, Delhi-110042

CERTIFICATE

I hereby certify that the Project Dissertation titled "Title of Project" which is submitted by [Name of the Student (s)], Roll No (s) ..... [Name of the Department], Delhi Technological University, Delhi in partial fulfillment of the requirement for the award of the degree of Master of Technology/Bachelor of Technology, is a record of the project work carried out by the students under my supervision. To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

Place: Delhi

Date:

(NAME OF SUPERVISOR)

SUPERVISOR