

# **Draft Guidelines on the Preparation of B.Tech. Project Report**

**Department of Mechanical Engineering**



**Mahatma Gandhi Mission's College of  
Engineering and Technology Noida**

(Affiliated to Dr.A.P.J Abdul Kalam Technical University, Lucknow)

**Year 2017-18**

## 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 on the student's research work to the future researchers. The Dept. is committed 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.

### **GUIDELINES FOR BTECH PROJECT**

The B. Tech. project is a partial requirement for successful completion of the degree.

**It can be two types:**

- a) Projects based on implementation of any application oriented problem, which will be more or less experimental in nature, and
- b) The others will be based on some innovative/ theoretical work.

### **Evaluation Process:**

#### **VII SEMESTER:-**

Students are supposed to deliver 4 presentations.

Total internal marks(50) break up is as follows:-

First presentation-5 marks totally synopsis basis presentation not more than 7-9 slides. Project approval is done in this presentation.

Second presentation-10 marks, not more than 10-15 slides.

Third presentation-10 marks, not more than 10-15 slides.

Fourth presentation-15 marks .Three days prior to fourth presentation students should submit spiral bound project report showing progress of current semester and agenda for final semester using PERT chart.

Rest 5 marks for project report and 5 marks for project attendance.

## **VIII SEMESTER:-**

Students are supposed to deliver a total of 4 presentations not more than 15-20 slides.

Internal Marks(100) Break up is as follows:-First presentation 20 marks ,second presentation 20 marks ,third presentation 40 marks , rest 10 marks is of attendance and 10 marks of final project report of the students in the presentations.

The final and fourth presentation would be given in front of external examiner and evaluated by him .External marks (250) which comprises of project, presentation and vivavoce related to project.

## **PROJECT DIARY**

Each group should keep a project diary which will be a record of progress in the work. The supervisor may give instructions to students regarding the work in the diary itself. Students should obtain the signatures of their students in the diary every week during the project period. The project diary will be evaluated at the time of final presentation. If the diary is not submitted or submitted late to the project coordinator, absent will be marked for the non-maintained period.

## **PROJECT REPORT STRUCTURE**

Title Page:-Mention Title of the report along with name of project group, supervisor, Department, Month and Year of submission.

Certificate: - signed by the supervisor. The certificate should mentioned that the work has been carried out by this project group and has not been submitted by any other group of the institute for the award of any other degree

Declaration

Acknowledgements

Abstract is an abbreviated version of the project report. It should be limited to a maximum of 250 words(introduction, problem statement ,procedures, results, conclusion)

Table of Contents provides the list of all headings and subheadings with page numbers

List of Tables

List of Figures

List of abbreviations

References

## **TEXT PROCESSING INFORMATION REGARDING REPORT PREPARATION**

1. Size of paper shall be 210 x 297 mm, i.e. **A4**.
2. Margins of pages shall conform to the following specifications.
  - a. Left margin - 2 1/2 cm. from edge of paper.
  - b. Right margin - 2 cm. from edge of paper.
  - c. Top margin - 2 1/2 cm. from edge of paper.
  - d. Bottom margin – 1.5 cm. from edge of paper.

The above margins shall be observed on charts, graphs, tables, and drawings

3. Headings used in the report shall conform to the following rules:
  - a. Spacing of the text material shall be 1.25
  - b. The font size must be 12 point in the text and at least 10 point in the figures.
  - c. Chapter Headings - CHAPTER 1, CHAPTER 2, CHAPTER 3 etc. (centred, font size 18, bold, uppercase letters)
  - d. Second Headings - 2.1, 2.2, 2.3, etc. (font size 14 towards left margin)
  - e. First sub-headings - 2.2.1, 2.2.2, etc. (12 font size)

### **4. Figures and Tables:**

All figures should be numbered and cited consecutively in the text as Figure 2.1, Figure 2.2, to indicate the first and second figures in Chapter 2 respectively. Similarly it is the case with tables such as Table 3.1, Table 3.2, etc.

**5. Size of Thesis:** it is expected that the number of pages in the report will not exceed 100 pages of typed matter reckoned from the First page of Chapter 1 to the last page of the Appendix.

**6. Binding Specifications:** Beside the supervisor's and personal copies, two copies of the project report should be bound in light Blue colour (Matt finish) hard rexin binding with golden printed letters on front cover to be submitted in the department. Ensure that the side face of thickness of the thesis should have the title of the project, month & year of submission.

**MGM's College of Engg & Technology,  
A-9, Sector 62, Noida**

**Department of Mechanical Engineering**

**Academic year 2017– 2018**

**BATCH: 2014**

**Project Diary**

**BATCH No:\_\_\_\_\_**

**Project Title:**

---

---

---

<b>Sr</b>	<b>Class Roll No</b>	<b>Exam Roll No</b>	<b>Name of student</b>
<b>1</b>			
<b>2</b>			
<b>3</b>			
<b>4</b>			

**Supervisors Name : \_\_\_\_\_**



# MGM's College of Engg & Technology

## Department of Mechanical Engineering

### Project Review details

Title:

Date:		Time: From _____ to _____		No of hours:	
Attendance:					
Sr	Roll No	Name of Student			Signature
Work Done by students:					
Comments of Supervisor:					
Sr	Name	Remarks			Signature
1	Supervisor				
2	Project Coordinator				
3	HOD				

## Assessment of Project Presentations.

1) Name:

Roll No:

Sr	Activity	Date	Total Marks by DEC
1	Presentation 1		/20
2	Presentation 2		/20
3	Presentation 3		/40
4	Attendance		/10
5	Project Report		/10
6	TOTAL		/100

2) Name:

Roll No:

Sr	Activity	Date	Total Marks by DEC
1	Presentation 1		/20
2	Presentation 2		/20
3	Presentation 3		/40
4	Attendance		/10
5	Project Report		/10
6	TOTAL		/100

3) Name:

Roll No:

Sr	Activity	Date	Total Marks by DEC
1	Presentation 1		/20
2	Presentation 2		/20
3	Presentation 3		/40
4	Attendance		/10
5	Project Report		/10
6	TOTAL		/100

4) Name:

Roll No:



Sr	Activity	Date	Total Marks by DEC
1	Presentation 1		/20
2	Presentation 2		/20
3	Presentation 3		/40
4	Attendance		/10
5	Project Report		/10
6	TOTAL		/100

Name & Sign of Guide: \_\_\_\_\_

Name & Sign of Project Coord: \_\_\_\_\_

Name & Sign of HOD: \_\_\_\_\_

Name & Sign of Chair Person: \_\_\_\_\_

**FORMAT OF COVER PAGE (Hard Bound)**

**TITLE OF PROJECT REPORT**

**by**

**Names of Students (Roll No)**

<Institute's Logo>

**Department of .....**

**Name of Institute**

**Address of Institute**

Affiliated to Uttar Pradesh Technical University, Lucknow

**Month, Year**

# **TITLE OF THE PROJECT**

*A dissertation*

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

*of*

**BACHELOR OF TECHNOLOGY**

*in*

**MECHANICAL ENGINEERING**

*Submitted by*

Full Name (Roll No.)

*Under the Supervision of*

*<Guide Name>*

*<Institute's Logo>*

Department of <Department's Name>

*<Institute Name>*

Affiliated to Dr A P J Abdul Kalam Technical University, Lucknow

*<Month, Year>*

(Example)

## TABLE OF CONTENTS

	Page
CERTIFICATE .....	ii
DECLARATION .....	iii
ACKNOWLEDGEMENTS .....	iv
ABSTRACT .....	v
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
LIST OF SYMBOLS .....	ix
LIST OF ABBREVIATIONS .....	x
CHAPTER 1 (INTRODUCTION, BACKGROUND OF THE PROBLEM, STATEMENT OF PROBLEM etc.).....	1
1.1. ....	5
1.2. ....	8
CHAPTER 2 (OTHER MAIN HEADING) .....	13
3.1. ....	15
3.2. ....	17
3.2.1. ....	19
3.2.2. ....	20
3.2.2.1. ....	21
3.2.2.2. ....	22
3.3. ....	23
CHAPTER 4 (OTHER MAIN HEADING) .....	30
4.1. ....	36
4.2. ....	39
CHAPTER 5 (CONCLUSIONS) .....	40
APPENDIX A .....	45
APPENDIX B .....	47
REFERENCES... ..	49

(Example of Certificate)

## **CERTIFICATE**

This is to certify that Project Report entitled “.....”  
.....” which is submitted by .....  
in partial fulfillment of the requirement for the award of degree B. Tech. in Department of  
..... Of Utter Pradesh Technical University, is a record of the  
candidate own work carried out by him under my/our supervision. The matter embodied in  
this thesis is original and has not been submitted for the award of any other degree.

**Supervisor**

**Project Coordinater**

**HOD**

### **External Viva**

**Name of Examiner**

**Signature with date**

(Example of Declaration)

## **DECLARATION**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

Signature:

Name :

Roll No.:

Date :

Signature:

Name :

Roll No.:

Date :

Signature:

Name :

Roll No.:

Date :

Signature:

Name :

Roll No.:

Date :

(Example of Acknowledgement)

## ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the B. Tech Project undertaken during B. Tech. Final Year. We owe special debt of gratitude to Professor Anshuman Singh, Department of Computer Science & Engineering, College of Engineering, Lucknow for his constant support and guidance throughout the course of our work. His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. It is only his cognizant efforts that our endeavors have seen light of the day.

We also take the opportunity to acknowledge the contribution of Professor M. S. Dhoni, Head, Department of Computer Science & Engineering, College of Engineering, Lucknow for his full support and assistance during the development of the project.

We also do not like to miss the opportunity to acknowledge the contribution of all teaching and nonteaching staff of the Department for their kind assistance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution, continuous support and encouragement in the completion of the project.

Signature:

Name :

Roll No.:

Date :

Signature:

Name :

Roll No.:

Date :

Signature:

Name :

Roll No.:

Date :

Signature:

Name :

Roll No.:

Date :

(Example of Abstract)

## **ABSTRACT**

The abstract is to be in fully-justified italicized text, at the top of the left-hand column as it is here, below the author information. Use the word “Abstract” as the title, in 12-point Times, boldface type, centered relative to the column, initially capitalized. The abstract is to be in 10-point, single-spaced type, and may be up to 3 in. (7.62 cm) long. Leave two blank lines after the abstract, then begin the main text. All manuscripts must be in English.

An Abstract is required for every paper; it should succinctly summarize the reason for the work, the main findings, and the conclusions of the study. The abstract should be no longer than 250 words. Do not include artwork, tables, elaborate equations or references to other parts of the paper or to the reference listing at the end. The reason is that the Abstract should be understandable in itself to be suitable for storage in textual information retrieval systems.



**CHAPTER 1**  
**INTRODUCTION**

(Example)

## LIST OF SYMBOLS

$[x]$	Integer value of $x$ .
$\neq$	Not Equal
	Belongs to
$\text{€}$	Euro- A Currency
$-$	Optical distance
$-o$	Optical thickness or optical half thickness

(Example)

## **LIST OF ABBREVIATIONS**

AAM	Active Appearance Model
ICA	Independent Component Analysis
ISC	Increment Sign Correlation PCA
Principal Component Analysis	ROC
Receiver Operating Characteristics	

(Example of **References using the Numeric System**)

## **REFERNCES**

### **Examples of Journal Article referencing:**

1. Drucker, D. C., "Photoelastic Separation of Principal Stresses by Oblique Incidence",  
Journal of Applied Mechanics, Vol. 65, pp. 156-160, 1943.
2. Maiers, J., and Sherif, Y. S. , "Application of Fuzzy Set Theory," IEEE Transactions on  
Systems, Man, and Cybernetics, Vol. SMC-15, No.1, pp. 41-48, 1985.

### **Example of Book referencing:**

3. Doe, N., Control System Principles, New York: John Wiley, 1999.

### **Example of Referencing of an Article in a Book:**

4. Hwang, C. J., "Rule-based Process Control," in E. Kumarmangalam and L. A. Zadeh  
(Eds.), Approximate Reasoning in Intelligent Systems, Decision and Control, pp. 145-  
158, Oxford: Pergamon Press, 1987.

### **Example of referencing of a B. Tech. Report:**

5. Nayak, T., "Application of Neural Networks to Nuclear Reactors," M.Sc. Report, U.P.  
Technical University, 2005.

### **Example of referencing of a Ph. D. Dissertation:**

6. Muskin, H. L., "Development of A Knowledge-Based System for a Nuclear Power Plant,"  
Ph.D. Dissertation, U. P. Technical University, 2003.

### **Example of referencing of a Conference Paper :**

7. Lokhande, R., Arya, K. V., and Gupta, P., "Identification of Parameters and Restoration of  
Motion Blurred Images", Proceedings of the 2006 ACM Symposium  
on Applied Computing (SAC 2006), pp. 89-95, Dijon, France, April 2- 7, 2006.

### **Example of referencing of a Paper presented at Conference but not Published :**

8. Lokhande, R., and Gupta, P., "Identification of Parameters of Motion Images", presented at  
5th International Conference on Cyber Systems, New Delhi, India, April 12- 17, 2004

### **Example of referencing of a Report [Technical, Internal, or Memoranda]: :**

9. Das, A. R., Murthy D., and Badrinath J., A Comparison of Different Biometrics Traits,  
RSRE Memorandum No. 4157, RSRE Malvern, 2001.

### **Example of referencing of a Manual**

10. Bell Telephone Laboratories Technical Staff, Transmission System for Communications, Bell Telephone Laboratories, 1995.

#### **Example of referencing of a Class Note**

11. "Signal integrity and interconnects for high-speed applications," class notes for ECE 497-JS, Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Winter 1997.

#### **Example of referencing of a Private Communication**

12. Banerjee, T., (Private Communication), 1998

#### **Example of referencing of an Article from Internet**

13. Biometrics Group, Indian Institute of Technology Kanpur, "Multimodal Biometrics System," December 2006, <http://www.cse.iitk.ac.in/users/biometrics.html>
14. Gupta, P. (pg@iitk.ac.in), "Biometrics System," Usenet post to sci.electronics.design, July 4, 2007.

#### **Example of referencing of an Article from Catalog**

15. Catalog No. MWM-1, Microwave Components, M. W. Microwave Corp., Brooklyn, NY

#### **Example of referencing of an Article from Application Note**

16. Hewlett-Packard, Appl. Note 935, pp. 25-29.

#### **Example of referencing of an Article from Application Note**

17. Kar, K. and Majumder, D., "Fuzzy Controller Component," U. S. Patent 23,160,040, December 21, 2006.

## APPENDIX

### FORMAT OF CD CONTAINING COMPUTER SOFTWARE

Each software developed by the Project's Group should be burnt in a CD with proper documentation. The CD should contain files containing the source code, one or more sample input and corresponding output separately. Other than these there must be another file named "READ.ME". In this ASCII text file, the following sections must be appear.

**Author's Identity.** A file should contain the name of each project group member along with the Supervisor's name.

**Files in the CD.** In this section, the names of the files together with their contents must be listed.

**Hardware Requirements.** In this section, we should note down the hardware requirements along with any special type of equipments/ components such as graphics card, numeric coprocessor, mouse, RAM capacity etc. needed to run the software.

**Software Requirements.** In this section, the operating system, the compiler, linker, and the libraries etc. necessary to compile and link the software must be listed. There is a need to obtain the necessary license from the copyright owner before one incorporates the copyrighted material file in CD.