

**TITLE OF THESIS / REPORT**  
**MAXIMUM FOUR LINES**  
**(font style: Times New Roman**  
**font size 16, Caps, Bold, Center)**

A project report submitted for the partial fulfillment of academic requirements for the award of Degree in Bachelor of Engineering / Master of Technology in the Department of Civil Engineering  
**(Font style: Times New Roman, font size 13)**

Submitted by

**STUDENT NAME**

**USN**

Under the supervision of

**NAME OF THE FACULTY**

**DESIGNATION**



ESTD : 1946

**Department of Civil Engineering**  
**The National Institute of Engineering**

(An Autonomous Institute under Visvesvaraya Technological University, Belagavi)

Manandavadi Road, Mysuru – 570 008, Karnataka, INDIA

**July 2022**



# The National Institute of Engineering

(An Autonomous Institute under Visvesvaraya Technological University, Belagavi)  
Manandavadi Road, Mysuru – 570 008, Karnataka, INDIA



- Recognized by AICTE, New Delhi
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- Grant-in-Aid by Government of Karnataka

## Department of Civil Engineering

### CERTIFICATE

Certified that the project work entitled ..... carried out by Mr./Ms. ...., USN....., a bonafide student of .....is submitted in partial fulfillment for the award of Bachelor of Engineering / Master of Technology Degree in.....of **The National Institute of Engineering, Mysuru**, an autonomous institute under Visvesvaraya Technological University, Belagavi during the year ..... It is certified that all suggestions/ corrections suggested during Internal Assessment have been incorporated in the Report deposited in the departmental library.

The project report/ dissertation has been approved as it satisfies the academic requirements in respect of Project work prescribed for the award of the said Degree.

Name & Signature of the Guide

Name & Signature of the  
HoD

Signature of the Principal

### External Viva

Sl. No. Name of the examiners

Signature with date

1.

2.

# NAME OF THE INDUSTRY / ORGANIZATION

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carried out by Mr./Ms . .....  
USN....., a bonafide student of  
..... is submitted in partial  
fulfillment for the award of Master of Technology in  
..... of the  
Visveswaraiah Technological University, Belagavi during the year  
.....It is certified that, he/she has completed the project satisfactorily

Name & Signature of the Guide

Name & Signature of the Head of organization

Note:

1. This certificate has to be submitted in the letterhead of the Industry/ Organization in which the student is carrying out the project.
2. The contents of the certificate may change from one Industry/ Organization to the other; the above can be taken as an indicator only.

## **DEDICATION**

*Dedication:* You can dedicate your research work (Master's / Ph.D.) to your parents / your loved once.

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## DECLARATION

I, \_\_\_\_\_ bearing USN: \_\_\_\_\_ student of \_\_\_\_ semester of UG/ M.Tech. programme \_\_\_\_\_, Department of \_\_\_\_\_, The National Institute of Engineering, Mysuru hereby declare that the project work entitled “ \_\_\_\_\_ ” has been carried out by me under the guidance of \_\_\_\_\_ (Name, Designation and Department of the supervisor) \_\_\_\_\_. This project work is submitted to **The National Institute of Engineering**, Mysuru, (An Autonomous institute under VTU, Belagavi) in partial fulfillment of the course requirements for the award of degree in \_\_\_\_\_ during the academic year \_\_\_\_\_. This written submission represents a record of original work and I have adequately cited and referenced the original sources.

Further the matter embodied in this thesis has not been submitted to any other University or Institution for the award of any degree.

Place: Mysuru

Date:

(Signature of the student)

## **ACKNOWLEDGEMENT**

*Acknowledgement:* You can acknowledge the people who have helped you in Bachelor's/Master's / PhD, it might be your guide, colleagues who have helped you in your work, laboratory staff who have assisted you, friends who have motivated you.

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## **ABSTRACT**

Should include:

- Background (Context, Objective) = 1–2 Sentences
- Methods (Methodology) = 2–3 Sentences
- Results = <10 Sentences
- Conclusion = 1-2 sentence

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## **LIST OF NOTATIONS/ABBREVIATIONS**

ASTM : American Society for Testing Materials

$a$  : Shear span

BS : British Standard

$b$  : Width of the specimen

C : Cohesion

CEA : Central Electricity Authority

cm : Centimetres

$D$  : Diameter of the specimen

$d$  : Thickness of the specimen

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# CHAPTER 1

## INTRODUCTION AND LITERATURE SURVEY

### 1.1 Introduction

Context building, Literature Survey (Consists of related works as published in refereed National and International Journals, National and International Conference proceedings, Text Books, Hand books etc., presented in a logical way);

Introduction and literature review can be merged. Introduction should be about 5 pages (maximum). *Introduction should say the following:*

- Background
  - Currently- Accepted General Statements
  - Available Supporting Data
- Gap

### 1.2 Literature Review

The chapters, sections and subsections may be numbered in the decimal form; for example sections of Chapter 1 should be named as **1.1, 1.2** etc., and subsections as **1.1.1** etc.

*Literature review should include the following:*

- Theoretical review/Conceptual Framework
  - Review the empirical and theoretical literature relevant to the problem being investigated
  - Indicate what has been done by other researchers including the methodologies used and identify gaps
  - The hypothesized variables should be subheadings of the literature review to form a framework that would help in analysis
  - Conceptual framework should demonstrate an understanding of what variable influences what
  - Use standard method of citation. Consistency is important in citation.
- Critique of the existing literature relevant to the study.
- Summary of literature (in points). Last point in summary of literature should say about research gaps
- Objectives and scope of the thesis

Generally, a single clear objective shall be defined; all relevant activities to be carried out to meet the said objective can be listed in scope. This implies that the objective of the project is a single statement, while scope can have few statements.
- Organization of the thesis

Use Name-year system to cite any literature

### In-Text Citation with CSE

The Name-Year system is recommended

author's last name → (Ribbet 2010) ← publication year

All of these pieces of information must match the corresponding reference list entry exactly!

#### Example in-text citations, from fictional authors and sources:

Research has shown that the demographic of the fly is a key determining factor in the robustness of its flavour (Frog 1998).

#### You could also place part of the citation in the text as follows:

As mentioned in Frog's seminal article (1998), the demographic of the fly is a key determining factor in the robustness of its flavour.

In this example, the author's name is mentioned in the text itself; therefore, the name need not be repeated in the bracketed citation.

## CHAPTER 2

### MATERIALS AND METHODS

#### 2.1 Introduction

Details of materials used, methods adopted in the project should be explained.

##### *For materials*

- Specify the apparatuses, including the manufacturers' names and addresses
- Identify all chemicals and supplies used
- Describe the salient characteristics of all experimental subjects and tell exactly how the subjects were found or chosen, including the eligibility requirements, the criteria for exclusion, and the nature of the source population from which they were drawn.

##### *For methods*

- Explain the overall design of your research program; add a flow chart suggesting the same.
- Fully describe all the operations and procedures in sufficient detail to allow other workers to repeat them and to reproduce your results
- Cite references for all previously documented methods, including any statistical methods
- Give complete recipes for any new or modified techniques
- Explain the procedures used to analyze your data

#### 2.2 Materials used

The chapters, sections and subsections may be numbered in the decimal form; for example, sections of Chapter 2 should be named as **2.1**, **2.2** etc., and subsections as **2.1.1** etc.

Title of the Figures should be indicated below the figure and numbered chapter wise

For example, a figure in chapter 2 should be indicated as:

**Fig 2.1 Block diagram of man machine chart**

(Bold)

(Bold)

Title of the Table should be indicated above the table and numbered chapter wise

For example, a table in chapter 2 should be indicated as:

**Table 2.1 Measured values of cutting forces**

(Bold)

(Bold)

##### 2.2.1 Building Material: Cement

## Chapter 3

### RESULTS AND DISCUSSIONS

#### 3.1 Introduction

The detailed results and discussion with relevant data and characteristic curves should be presented with appropriate conclusions.

The chapters, sections and subsections may be numbered in the decimal form; for example sections of Chapter 3 should be named as **3.1, 3.2** etc., and subsections as **3.1.1** etc.

Title of the Figures should be indicated below the figure and numbered chapter wise

For example, a figure in chapter 3 should be indicated as:

**Fig 3.1 Block diagram of man machine chart**

(Bold)

(Bold)

Title of the Table should be indicated above the table and numbered chapter wise

For example, a table in chapter 3 should be indicated as:

**Table 3.1 Measured values of cutting forces**

(Bold)

(Bold)

## Chapter 4

# CONCLUSIONS

### 4.1 Introduction

The **conclusion** should contain

- Introduction-A brief on the chapter
- Summary- This is an extended abstract
- Conclusions- Must be derived from the summary
- Recommendations- Should come from the conclusions

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## REFERENCE

- Use referencing software like Mendeley. Department can chose the type of referencing style.

### **A. For books and pamphlets, the order may be as under:**

- 1) Name of author, last name first
  - 2) Title, in italics / double quotes
  - 3) Publisher, Place and date of publication
1. Hendry, A.W., “Structural masonry”, 2nd edition, Macmillan, London, 1998.
  2. Kothari, C.R., *Quantitative Techniques*, Vikas Publishing House Pvt. Ltd., New Delhi, 1978.

### **B. For code books:**

1. IS 2250 – 1981 (Reaffirmed 2000), “Code of practice for preparation and use of masonry mortars”, Bureau of Indian Standards, New Delhi, India.
2. IS 3495 – 1992 (Reaffirmed 2002), “Methods of tests of burnt building bricks – Part I: Determination of compressive strength”, Bureau of Indian Standards, New Delhi, India.
3. ASTM C67 – 1994, "Standard test methods of sampling and testing brick and structural clay tile", American Society for Testing and Materials.

### **C. For book chapters (When book has been written by many authors)**

1. Gourav, K. and Ullas, S. N., “Characteristics of Flowable Stabilised Earth Concrete”. In: Reddy B., Mani M., Walker P. (eds) *Earthen Dwellings and Structures*. Springer Transactions in Civil and Environmental Engineering. Springer, Singapore, 2019.

### **D. For thesis (PhD or Master’s)**

1. Gourav, K., “Studies on compacted stabilized fly ash mixtures and fly ash bricks for masonry”. M. Sc. (Engg) thesis, Department of Civil Engineering, Indian Institute of Science, Bangalore, India, 2009.

### **E. For journals, magazines and newspapers the order may be as under:**

- 1) Name of the author
  - 2) Title of article.
  - 3) Name of journal
  - 4) The volume and number
  - 5) The date of the issue
  - 6) The page numbers
1. Venkatarama Reddy, B. V. and Gourav, K., “Strength of lime-fly ash compacts using different curing techniques and gypsum like additive”, *Materials and Structures (RILEM)*, Vol. 44, No. 10, December 2011, pp. 1793 – 1808.
  2. Yang, J., Liu, W., Zhang, L. and Xiao, B., “Preparation of load-bearing building a. materials from autoclaved phosphogypsum”, *Construction and Building Materials*, Vol. 23, No. 2, 2009, pp. 687 – 693.

**F. For conference presentation:**

1. Gourav, K., Balaji, N. C., Venkatarama Reddy, B. V. and Mani, M., "Studies into structural and thermal properties of building envelope materials". CISBAT 2017 - International Conference at EPFL, September 6 - 8, 2017, Lausanne, SWITZERLAND.

**G. For reports from website:**

1. Ministry of Power, Government of India, 2014  
[http://powermin.nic.in/JSP\\_SERVLETS/internal.jsp](http://powermin.nic.in/JSP_SERVLETS/internal.jsp), accessed on 16 December, 2014.

**H. For software:**

1. ATENA, "3D Nonlinear analysis software". Cervenka Consulting (<http://www.cervenka.cz>.) Predvoje 22, 162 00 Praha 6, Czech Republic, 2006.

## **APPENDICES**

Should include:

- Questionnaires
- Sample information
- Mathematical derivations and the like ones
- Bulk of data in table form

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## **LIST OF PUBLICATIONS**

List the paper published followed by published article

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