## MAJOR & MINOR PROJECT GUIDELINES Lalitpur Engineering College

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### PROJECT GUIDELINES

- 1. COVER PAGE (Center Alignment)
- 2. TITLE PAGE
- 3. ACKNOWLEDGEMENT
- 4. ABSTRACT
- 5. TABLE OF CONTENT
- 6. LIST OF TABLES
- 7. LIST OF FIGURES
- 8. LIST OF ABBREVIATIONS
- 9. LIST OF EQUATION
- 10. CHAPTER 1. INTRODUCTION
  - 10.1 Introduction
  - 10.2 Motivation
  - 10.3 Problem Statement
  - 10.4 Objectives
  - 10.5 Scope and Application
  - 10.6 Originality of Project
  - 10.7 Organization of project report
- 11. CHAPTER 2. LITERATURE REVIEW
- 12. CHAPTER 3: REQUIREMENT ANAYSIS
- 13. CHAPTER 4: METHODOLGY
  - 13.1 Theoretical Formulation
  - 13.2 Mathematical Modelling
  - 13.3 Implementation Details

- 14. CHAPTER 5. SYSTEM DESIGN:
- 15. CHAPTER 6: RESULT AND ANAYSIS
- 16. CHAPTER 7: CONCLUSION AND FUTURE ENHANCEMENTS
- 17. REFERENCES
- 18. APPENDICES

### Literature Review

#### Guidelines

Each reviewed work should include the following:

- What is the work?
- How is it done? (methods, algorithms, innovations)
- Applications or importance
- Limitations or drawbacks
- Critical observations

#### 2.1 Work 1 Title

- Summary: [Brief summary]
- Methodology: [How it works]
- Applications: [Use cases]
- $\bullet$   $\mathbf{Drawbacks:}$  [What it lacks]
- Criticism: [Why it could be improved]

## Requirement Analysis

### 3.1 Hardware Requirements

• e.g., Raspberry Pi, Camera, etc.

### 3.2 Software Requirements

• e.g., Python, TensorFlow, Flask, etc.

### 3.3 Feasibility Study

#### 3.3.1 Technical Feasibility

[Describe technology viability]

#### 3.3.2 Economic Feasibility

[Describe budget considerations]

#### 3.3.3 Operational Feasibility

[Discuss system usability]

#### 3.3.4 Legal Feasibility

[Licensing or compliance issues]

## Methodology

#### 4.1 Overview

Explain the order of execution of each block/component.

### 4.2 Detailed Description of Each Stage

#### 4.2.1 Data Collection

Describe how data was gathered.

#### 4.2.2 Preprocessing

List algorithms or methods (e.g., normalization, augmentation).

#### 4.2.3 Model Development

- Model type (e.g., CNN, SVM)
- Algorithm or architecture
- Training process

#### 4.2.4 Testing and Evaluation

Describe performance metrics (accuracy, precision, recall, etc.)

## System Design

- 5.1 System Architecture / Block Diagram
- 5.2 Block Descriptions

Explain each module (e.g., Data Collection, Preprocessing, Model Training, etc.)

- 5.3 ER Diagram (if applicable)
- 5.4 Data Flow Diagram

## Result and Analysis

### 6.1 Results

### 6.2 Analysis

Use graphs for visual representation.

### 6.3 Comparison with Existing Works

Compare metrics or outcomes.

# Conclusion and Future Enhancements

#### 7.1 Conclusion

Summarize your objectives, methods, and outcomes.

#### 7.2 Limitations

Clearly state what you could not cover.

### 7.3 Future Enhancements

- Integration with mobile apps
- Real-time streaming data support
- Deployment on edge devices