INFORMATION AND COMMUNICATIONS UNIVERSITY

SCHOOL OF ENGINEERING

DEPARTMENT OF DESIGN AND TECHNOLOGY

Final Year Thesis Guidelines – Design and Technology

Introduction

Students pursuing a Design and Technology project at the **School of Engineering, Department of Design and Technology** are required to follow specific guidelines when preparing their final year thesis. This document outlines the structure, formatting, and submission requirements to ensure clarity, consistency, and adherence to academic standards.

Required Thesis Structure

Each project report must include the following components:

Preliminary Pages

1. **Title Page** – The first page of the report should contain the project title, student's name, institution, department, and submission date.
2. **Declaration Page** – A formal declaration by the student stating that the work is original and has not been submitted elsewhere.
3. **Certificate of Approval Page** – A page signed by the supervising lecturer, indicating approval of the work.

4. **Acknowledgment Page** – A section where the student expresses gratitude to individuals or institutions that contributed to the project.
5. **Dedication Page (Optional)** – If included, this page allows students to dedicate their work to someone special.
6. **Glossary Page** – A list of abbreviations and their meanings to help readers understand technical terms.
7. **Abstract Page** – A brief summary of the entire project, outlining objectives, methodology, key findings, and conclusions.
8. **Table of Contents** – A structured list of all sections and sub-sections within the report.
9. **List of Tables** – A numbered list of all tables included in the document.
10. **List of Figures** – A numbered list of all figures (such as diagrams or charts) used in the report.

Main Chapters

Chapter 1: Introduction

This chapter sets the foundation for the research and includes:

- **Introduction** – A brief overview of the project.
- **Background** – Contextual information related to the project.
- **Justification** – Reasons why the project is important.
- **Significance** – The expected impact or contribution of the project.
- **Problem Statement** – The specific issue or challenge the project aims to address.
- **Main Objective** – The overall goal of the project.
- **Specific Objectives** – Detailed, measurable targets to achieve the main objective.
- **Limitations** – Any constraints or challenges faced during the study.

Chapter 2: Literature Review

- **Introduction** – Overview of existing knowledge related to the project.

- **Review of Literature** – A discussion of previous research, theories, and models relevant to the topic.
- **Related Works** – Analyzing existing designs, methodologies, or products similar to the project.
- **Summary** – A concise wrap-up of key insights from the literature review.

Chapter 3: Methodology

- **Introduction** – Explanation of the approach taken for the project.
- **Design Concept** – Description of the conceptual framework behind the project.
- **Design Interpretation** – How the concept translates into practical implementation.
- **Bubble Diagrams** – Visual representation of project design flow.
- **Material Selection & Specification** – Justification for the materials chosen.
- **Electronics** – Description of electronic components (if applicable).
- **2D Drawings** – Technical illustrations showing different views.
- **Isometric Drawing** – A three-dimensional representation of the final product.

Chapter 4: Results and Discussion

- **Introduction** – Overview of the testing and evaluation process.
- **Machine Testing Results** – Presentation of test data and performance outcomes.
- **Discussion** – Interpretation and analysis of results.

Chapter 5: Conclusion and Recommendations

- **Introduction** – A summary of findings.
- **Conclusion of the Product** – Evaluation of the final design.
- **Conclusion on the Results** – Interpretation of testing outcomes.
- **Recommendations** – Suggestions for improvement.
- **Future Works** – Possible areas for further development or research.

References and Appendices

- **Referencing Style**: Students must use the **Harvard System of Referencing** for citing sources.
- **Appendices**: Additional supporting materials such as raw data, extra diagrams, or extended explanations.

Submission Requirements

1. **Report Format**
    - **Bachelor's Degree**: Maximum of 80 pages.
    - **Master's Degree**: Maximum of 100 pages.
    - Students must submit **three** neatly bound hard copies and a soft copy (including SolidWorks drawings) on a **Flash Drive**.
2. **Project Presentation**
    - Students must **present and defend** their project before a panel of **Information and Communications University (ICU) examiners**.
    - The presentation should last **15-20 minutes**.
    - Required materials:
        - **PowerPoint presentation (15-20 slides)** summarizing the project.
3. **Communication**
    - Students will receive **official notifications** via **AIMS or email** regarding their presentation schedule.

Purpose of the Guidelines

These guidelines ensure that students produce well-structured, professional, and academically rigorous reports that meet university standards. Adhering to them will help students present their work clearly and effectively while demonstrating their technical and research skills.