UNIVERSITY OF MAIDUGURI
(Faculty of Engineering)
COMPUTER ENGINEERING DEPARTMENT

CPE 599

PROJECT GUIDELINES AND GRADING

1.0 PROJECT REPORT WRITING

All project reports, which must be written in English, should conform to the following guidelines:

1.1 Organizational sequence

The whole report should be organized as follows:

- ✓ Cover Page
- ✓ Title page
- ✓ Declaration
- ✓ Certification
- ✓ Dedication
- ✓ Acknowledgements
- ✓ Abstract
- ✓ Table of Contents
- ✓ List of Tables
- ✓ List of Figures
- ✓ List of Plates
- ✓ List of Appendices (if any)
- ✓ List of Abbreviations and symbols
- ✓ CHAPTER ONE: INTRODUCTION
- ✓ CHAPTER TWO: LITERATURE REVIEW
- ✓ CHAPTER THREE: DESIGN AND CONSTRUCTION PROCEDURES
- ✓ CHAPTER FOUR: DTEST, RESULTS AND DISCUSSION
- ✓ CHAPTER FIVE : SUMMARY, CONCULUSION AND RECOMMENDATION
- ✓ References
- ✓ Bibliography
- ✓ Appendices (if any)

2.0 PRELIMINARY PAGES

The first 13 items in the organizational sequence form the preliminary pages and should be written as discussed below

(A) COVER PAGE

The cover page of the project should be as follows:

DESIGN AND CONSTRUCTION OF CARD ACTIVATED CORD LOCK SYSTEM

BY

MOHAMMED, SAMAILA MUSA
(xx /05/04/xxx)

DEPARTMENT OF COMPUTER ENGEINEERING
FACULTY OF ENGINEERING
UNIVERSITY OF MAIDUGURI

JANUARY, 2004

(B) TITLE PAGE

The title to the project should appear on the top of the title page typed in capital letters. This should be followed by the 'BY' and the candidate's name in full, underneath which should appear the ID. NO. of the candidate in parenthesis. The name should be written such that the surname comes first separated by corner and then the other names. The name should be followed by a statement by the candidate indicating the nature of the write-up, where it is to be submitted and for what purpose. Example:

DESIGN AND CONSTRUCTION CARD ACTIVATED CORD LOCK SYSTEM

BY

MOHAMMED SAMAILA MUSA
(xx/05/04/xxx)

A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF COMPUTER ENGINEERING, FACULTY OF ENGINEERING, UNIVERSITY OF MAIDUGURI IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF ENGINEERING (B.ENG) IN COMPUTER ENGINEERING

JANUARY, 2012

(C) DECLARATION

This should be written as follows:

I hereby declare that this project report was written by me and it a record of my own project work. It has not been presented before in any previous application for a bachelor's degree. References made to published literature have been duly acknowledged.

..... Date:.....

Name of Student

(xx/05/04/xxx)

(D) CERTIFICATION

This should be written as:

We certify that this final year project 'DESIGN AND CONSTRUCTION OF CARD ACTIVATED CORD LOCK SYSTEM' for the award of Bachelor of Engineering degree in Computer Engineering was carried out and duly presented by Mohammed Samaila Musa (xx/05/04/xxx) of the Department of Computer Engineering, Faculty of Engineering, University of Maiduguri and has been accepted by the examiners.

…… …….

(Name of Supervisor) (Name of External Examiner)

Supervisor External Examiner

……

(Name of Head of Department)

Head of Department/Chief Examiner

(E)DEDICATION (OPTIONAL)

Here, the candidate dedicates the project report to whomever and /or whatever he/she whishes. i.e the candidate is free to dedicate the whole work to either living or non-living thing E.g.

This project report is dedicated to my late parents, my wife, my children and also to my white horse and the black stone behind my house.

(F) ACKNOWLEDGEMENTS

In this section the candidate shows his/her gratitude to those who contributed in one way or the other towards the successful completion of the work. However, the exact area where the assistance was received should be pointed out clearly and should not be made as a media request programme where cards are picked and announced.

(G) ABSTRACT

This should be short, not exceeding 300 words. It should contain a brief background of the work, the objectives, materials and methods employed, major findings and recommendations made for further research work. This section should be written after the project has been completed.

(H) TABLE OF CONTENTS

The table of contents should contain an outline of the preliminary pages, chapters an their subheadings and the corresponding pages (where they appear).

(i)LIST OF TABLES

This should contain the list of tables presented in the report, It should include the table number, title and the corresponding pages where they appear.

(J)LIST OF FIGURES

This is a list of the figure used or generated in the report. It should include figure number, caption and the corresponding pages where they appear.

(K)LIST OF PLATES

This is a list of plates presented in the report and should include the plate number, caption, and the corresponding pages where they appear.

(L) LIST OF APPENDICES

This contains the list of appendices (if any) together with the corresponding pages in which they appear.

(M)ABBREVIATIONS AND SYMBOLS

Here, the candidate lists and define all the abbreviations and symbols used in the report.

3.0 BODY OF THE PROJECT REPORT

The body of the project report should consist of the following:

- ✓ Chapter one: Introduction
- ✓ Chapter two: Literature Review
- ✓ Chapter three: Design and Construction Procedure
- ✓ Chapter four: Tests, Results and Discussion
- ✓ Chapter five: Summary, Conclusion and Recommendation

(A)CHAPTER ONE: INTRODUCTION

This chapter lays the basic foundation of the whole work and it gives direction to the study. It should contain the following sub-headings:

(I)BACKGROUND

In this section, the necessary information required for the understanding of the importance of the project should be outlined. It would be a good practice to start this section with an attention-arresting statement. Necessary literatures should also be used in this section. The most important thing to note about the background is that it provides the reader with the picture that a problem exists, which needs to be solved.

(II) PROBLEM STATEMENT

After a study problem has been established in the background, there is a need to formulate and define the problem in a concise form. The candidate is them expected to state what exactly the problem is and the nature of the solution needed in not more than one paragraph.

(III) AIM AND OBJECTIVES

This should refer to what will be accomplished at the end of the project. In this section the problem is operationally defined and the aims emphasized.

(IV) SCOPE

This deals with the extent of the problem the researcher is able to tackle in the project. This entails stating clearly the boundaries of the study i.e what will and what will not be achieved it is a way of bringing the problem into a sharp focus.

(V)SIGNIFICANCE

This section shall deal with two major things:
(i)Who will benefit from the findings and
(ii) How they will benefit
These should be based on:
(a) Its contribution to the body of knowledge (in terms of theory of practice)
(b) Applicability in solving some existing problems.

(B) CHAPTER TWO: LITERATURE REVIEW

A literature review should contain information on previous work relevant to the topic, and their implications for the study organized in a systematic way . Students should try as much as possible to have up to date information on the topic.

(C)CHAPTER THREE: DESIGN AND CONSTRUCTION PROVEDURE

This section deals with the design and construction stages, detailing all calculations and working drawings. Design considerations for the choice of components values and packaging materials should

also be argued out in this chapter. The methodology is very important and should be included in this section.

(D)CHAPTER FOUR: TESTS, RESULTS AND DISCUSSION

This chapter should contain the findings of the project work. Results should be presented in tables, figures and plates where necessary. A brief description of the results showing how the aims of the research have been achieved is also necessary.

(E)CHAPTER FIVE: SUMMARY , CONCLUSION AND RECOMMEDNDATION

Summarize your work in 2-3 paragraphs. Conclude your findings and make recommendations for further work.

4.0 REFERENCES

All publications quoted in the text should be presented in a list of References at the end of the project report in alphabetical order.
(a)Book References
References to books are given as follows:
(i)if one author:
Gladdstone, I.K.L. (1963), Source Book on Nuclear Energy. John Wiley and Sons, New York, Pp.450 – 750.
(ii)if two authors:
Yusuf, J. T and Bature, R. w. (2008) Science Education in Nigeria. Heinemann Educational Books (Nig)Ltd, Pp.121 -130.

(b)Journal References

These should be written in the following format:
Kadalla, A.S., Oriolowo, Z.N. and Visa, I.M. (2007), Microcomputer Controlled PCB Drilling Machine, Journal of Engineering for Development, University of Benin, Nigeria 7:351-362.

(c)For Reference to Articles, collected papers or chapters in a book

The following should be used:
(i)When the book is edited:
Kadalla, A.S. and Onogu, M. I. (2007), Sliding mode Control of Magnetic Levitation Vehicles, in: Akii I. (Ed) Advances in Material and Systems Technologies, Trans Tech publication, Switzerland, Pp.79 – 86.
(ii)When a chapter is written in a book authored by another person: cassels, J.H.(1982). The monte-Carlo Method. In: Froberg, A.N. Introduction to Numericla Analysis. Pp.384 – 395. Addison Wesley Publishing Co., Sydney.

(d) For unpublished materials (e.g Thesis, occasional paper, speeches, letters etc).

Write the surname of the author followed by his initials, year, title of material, natire of material, where it is available or presented e.g.

Adarnu, O. (2008), Design and Construction of a 1KVA Microprocessor Controlled Triac Actuated Stabilizer. Unpublished B. Eng. Thesis, Electrical and Electronics Engineering Department, Federal University of Technology, Yola, Nigeria.

Urnaru, S.A., Samaila, M.A. and Dupe, C.P. (1999), Appraisal of resources of the northern zone of Adarnawa State. Paper presented at the 24t1 Annual Conference of the Nigerian Mining and Geosciences Society held at the University of Jos, Jos, Nigeria, 5-9 April.

(e)For Proceedings

Prpceedings that are edoted and published in the form of a book should be listed in the same way as for a book: e.g

Smith, J. J. (1988). Technological Procedures of electron been welding and repair. In: Adernole, T. S.(Ed.). Materials and Manufacturing Peocesses, Pp. 128-140. Proceedings of the conference held at the Federal University of Technology, Akure, Nigeria , July 1986. Proceedings series No. 123, FUTA, Akure.

Brown, M.G. A. (1989). Routing Multilayer boars on Steiner metric in: proceedings of the IEEE International Symposium on circuits and systems, pp. 25 – 36.

(f) For Articles In A Newspaper

Name of the writer should be indicated if it is known, otherwise use the name of the newspaper e.g.

Nwokolo, C. (1983). Science for survival : The Nigerian option. The Guardian, February, 25, p 21. Daily Times (1993) Editorial. April 14, p.18.

(g) Annual Report

The following form should be used:

Adenuga, P. N. (1989). Strength evaluation of concrete pours with additives in a hot environment.

In: Sixth Annual Report, Pp 29 – 30 , Department of Civil Engineering , Federal University of Technology, Akure, Akure, Nigerian.

(h) Online Content Or Website

Ngai P., 2009. Radio Wave Propagation Models Used in RF Coverage Analysis. (online).

Available from:

http: // www. articlesbase. com/ communication-articles /radio-wave-propagation-models-used-in-rf-coverage-analysis – 1151047. Html

(Accessed 26th August, 2010)

Note: The use of Wikipedia or similar websites is **NOT** allowed as a reference material.

5.0 LANGUAGE AND STYLE

(a) The project report must be written in UK English.

(b) Great care should be taken to make the project report a scholarly contribution to knowledge, including language and accuracy of expression. A project report must be accurate, its language precise, formal and objective. Expression should be in the third person.

(c) Proper attention should be paid to such skills as correct spelling, punctuation, sentence structure, capitalization and proper use of italics where necessary.

6.0 TYPING INSTRUCTIONS

(a) Paper size and character fonts

(i) Use A4 paper (21.0 x 29.7cm)

(ii) Use Time New Roman fonts throughout the report.

(iii) Use font sizes 18 for cover and title papes, 16 for chapter titles, 14 for subheadings. And they should be bold. For the remaining body font size should be 12.

(b) The following points should also be noted

(i) Type on one side only

(ii) Use double spacing throughout the text. In case where table cannot fit into these requirements, appropriate adjustments may be made. In the list of references, single splaying may be used between the lines of a reference. Use double spacing to separate different references.

(iii) The beginning of paragraphs should be indented.

(iv) Provide adequate margins of 3.5 cm on the left and right hand side margins, and 2.5 cm on top and bottom of each page.

(v) Try not to break words at the end of lines, but where this is unavoidable, use a hyphen and break the word at the end of a syllable.

(vi) Use Microsoft equation editor to type any equation in the text.

(vii) Use UK Components symbols in drawing circuit diagrams

(viii) All circuit diagrams and drawings gotten from websites, online materials e. t. c. should not be copied and pasted but redrawn using AUTOCAD or other similar software. The must be acknowledged by citing it.

7.0 TABLES, FIGURES AND PLATES

(a)Tables

Tables should be so constructed that they could be read and understood without reference to the text of the of the report. A table should therefore be simple, presenting only one general kind of date or relationship. A good table should contribute to the progress of analysis and valid generalization of findings inherent in the original data.

Tables within text should be brief and clear, such tables should be typed as near as possible after the paragraph in which they have been mentioned for the first time. Full-page tables should be inserted immediately after the page in which they have been mentioned for the first time. Tables based on data other than those collected directly from the investigation and/or very long tables should normally be inserted as appendices at the end of the report.

Each table should have a clear and self explanatory titles set to the left at the top of the table.. The titles should be numbered according to the chapter in which they are presented. For example, tables in chapter four should be numbered Table 4.1, Table 4.2 etc. all tables should be discussed within the text.

(b) Figures and plates

Figures include graphs, charts, drawings, diagrams, etc. The term "Figures" thus refers to any type of graphic illustration other than a table. Figures should be clear elegant and simple to interpret. There shall be no copying and pasting of figures but all figures must be redrawn. Mounted illustration such as photographs are usually referred to as plates. Each figure of plate must have a concise but comprehensive caption. The caption should be typed below the figures or plates and should be numbered in Arabic numerals according to the chapter in which they are used. Figures or plates should be placed as near as possible after the paragraph in which they have been mentioned for the first time. Full page figures should be inserted immediately after the page in which they have been mentioned for the first time. Large figures may either be neatly folded or photographically reduced to the required size.

SEMINAR PRESENTATION

The seminar is to develop necessary oral communication skill on the project with emphasis on the results and what has been achieved. A student should be preparing clear, simple, vivid and natural to make presentation is 5 minutes before responding to questions.

Seminar presentation is guided by the following when a student's name is called for presentation:

- ✓ Introduction: Provide title motivation what your project is set out to achieve
- ✓ Methods: Show your circuit design with brief equations for the choice of each component
- ✓ Results : Display your results using graphs, tables and measured values. Indicate errors between theory and experimental values
- ✓ Conclusion: State clearly your achievement and success on the project. State also applications and usefulness.
- ✓ The seminar presentation shall be scored by all staff to determine an average performance.

GRADING

The project work has a total score of 100 marks. Out of this score the Supervisor allocates a total of 50 marks, the panel has a total of 30 marks and the External Examiner has total of 20 marks to assign.

The student's project work is assessed based on the following:

1. **Introduction:** Motivation, Problem statement, Scope and Significance
2. **Literature Review:** Review of related works, Appropriate citations inside the work and correct reference list
3. **Theoretical design:** Development of Block and circuit diagram and flowchart and data flow diagram and derivation of component values and development of program code.
4. **Result presentation:** Numbering of equations, diagrams, graph & tables and sequential & logical flow of results

5. **Practical Implementation of Design:** Assemblage of components and integration of program code, soldering, wire layout & labeling and Test point indication & packaging.
6. **Project Presentation and Result:** Layout of project report in standard form, Neatness, Good English and reasonable conclusions drawn from result.
7. **Oral presentation:** Appearance, flow in presentation, loudness, clarity and rhetoric
8. **Work Appraisal:** Completeness and Realization of work.