

***TEMPLATE FOR UNDERGRADUATE SEMINAR REPORT
WRITING***

PRESENTED

BY

***ENGR. DR. S.O OKOZI
(Seminar coordinator)***

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI

13TH OCTOBER, 2023

OUTLINES

❖ Writing Style

- ✓ Writing specification

- ✓ Figures caption

- ✓ Equation format

- ✓ Table caption

- ✓ Referencing

❖ Report format

WRITING SPECIFICATION

The accepted font size, colour and other style of writing formats are summarized in table 1.

ITEM	SPECIFICATION
Font type	Times New Roman
Font colour	black (automatic)
Font size	13 or 14
Line spacing	1.5 (abstract 1.0)
Page numbers	bottom, right-hand side of the page

FORMAT FOR FIGURE CAPTION

A figure must be introduced before the drawing. The numbering has to conform with the chapter as follows, Fig. 1.1, Fig. 1.2, Fig. 1.3 etc. for figures in chapter one and Fig. 2.1, Fig. 2.2, Fig. 2.3 etc for figures in chapter two and so on. The caption of the figure must be bold.

For instance;

-figure caption contd-

There exist nine electricity distribution companies in Nigeria with voltage levels of 11kV, 0.415kV and finally 240V for a single phase consumer. The method used to convey electricity from the power station to the consumer is shown in Fig. 1.1.

Note: Figures not originally drawn by the student should be referenced while a picture of a figure should be a plate

-figure caption contd-

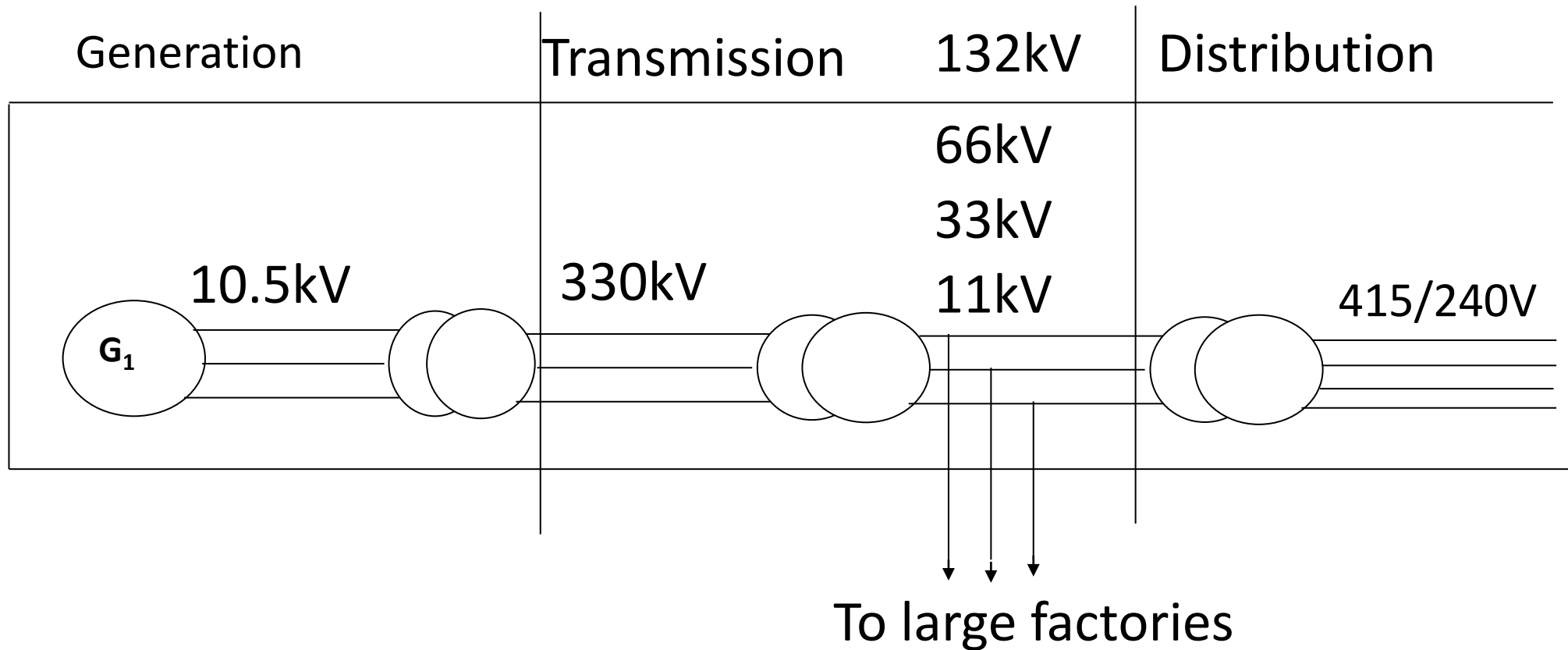


Fig. 1.1: How electricity is conveyed from generation to consumer end

FORMAT FOR TABLE CAPTION:

A table must be introduced before its insertion and the caption should appear boldly at the top of the table. Information in a table not measured or calculated should be referenced. The numbering should also tally with the chapter under discussion.

For instance;

The frequency response of a power system is dependent on the values of the parameters used for the simulation. The nominal values of the parameters used are as shown in table 1.1.

Table 1.1: Nominal Values of the Modelling Parameters

S/N	Parameter	Value	Unit
1	a_{12}, a_{13}, a_{23} and a_{34}	1	-
2	b_1, b_2, b_3 and b_4	0.425	p.uMW/Hz
3	R	0.00833	pu MW/Hz
4	F	50	Hz
5	H_i	5	Sec

Source: [1]

REFERENCING

We use IEEE referencing and citation format for all undergraduate research, term paper, seminar, or project reporting in the department of Electrical and Electronic Engineering, FUTO.

A detailed referencing format is attached in slide 37-43.

REPORT FORMAT

The report is organized in this format;

A. PRELIMINARY PAGES

- ***Cover page***
- ***Certification page***
- ***Dedication***
- ***Acknowledgement***
- ***Abstract***
- ***Definition of terms***
- ***List of symbols and abbreviation***
- ***List of tables***
- ***List of figures and diagrams***
- ***Table of contents***

B. MAIN PAGES

- ***Chapter 1- Introduction***
- ***Chapter 2- Literature Review***
- ***Chapter 3- Seminar topic***
- ***Chapter 4- Conclusion***

C. POST PAGES

- ***References***

TITLE OF THE SEMINAR (WHATEVER THE TITLE MAY BE)

BY

SURNAME, FIRST NAME OTHER NAME

REG NO

OPTION

SUBMITTED TO

THE DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

SCHOOL OF ELECTRICAL SYSTEMS ENGINEERING TECHNOLOGY

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE BACHELORS OF ENGINEERING
DEGREE (B. Eng.)**

IN ELECTRICAL AND ELECTRONIC ENGINEERING

FEDERAL UNIVERSITY OF TECHNOLOGY, OVERRI

MONTH, YEAR

CERTIFICATION

This is to certify that this seminar work, “**Implementation of WAMS in Nigeria Transmission system to mitigate outage time**”, was an authentic work carried out by **Okoye Zephaniah Echezonachukwu (20182097073)**, in partial fulfilment of the requirements for the award of the Bachelor of Engineering (B. Eng.) degree in Electrical and Electronic Engineering, Federal University of Technology, Owerri.

Approved By:

.....
Engr. Dr. C.K Joe-Uzuegbu
Supervisor

.....
Date

DEDICATION

ACKNOWLEDGEMENT

The student use this opportunity to appreciate those who have supported in one way or the other in the course of carrying out this Project. It's fair if a student starts with his/her supervisor, HOD, course adviser and seminar coordinator. Then other lecturers that have taught you, and other people who have helped you in one way or the other in the cause of achieving this work.

ABSTRACT

Synopsis is a one page summary of the student's work. It is usually written at the end of the seminar when all the topics have been exhausted. No paragraph is allowed in the synopsis.

DEFINITION OF TERMS

Some big/ambiguous technical terms used in the work are defined to enable the reader flow with your report.

LIST OF SYMBOLS AND ABBREVIATION

Such frequently used symbols and abbreviation are defined here for easy acces to the reader.

For instance,

ANN	Artificial Neural Network
FLC	Fuzzy Logic Control
PLC	Programmable Logic Control
RF	Radio Frequency
MATLAB	Matrix Laboratory
PI	Proportional Integral
PID	Proportional Integral Derivative
SCADA	Supervisory Control and Data Acquisition

LIST OF TABLES

The tables used in the text/report are listed here serially with the corresponding page numbers

For instance,

Table 1.1	Nominal Values of the Modelling parameters	15
Table 1.2	Capacities of the Nigerian generating stations	18
Table 3.1	System failures for the Nigerian Power System Network	28

LIST OF FIGURES AND DIAGRAMS

The figures/diagrams used in the text/report are listed here serially with the corresponding page numbers

For instance,

Figure 1.1	How electricity is conveyed from generation to consumer end	4
Figure 1.2	Control block diagram of a power system	7
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1.2 Statement of the Problems	

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1.5 Scope of the study

CHAPTER TWO: LITERATURE REVIEW

CHAPTER THREE: SEMINAR TOPIC

CHAPTER FOUR: CONCLUSION

REFERENCES

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

One of the preliminary steps to completing a thesis is the background study for it. The **background study** is a compilation of sufficient information based on the analysis of your proposed argument or problem and the steps required to arrive at the design and implementation of feasible solutions and the results achieved. The background of study enables the author to prove to the reader that he understands the topic under discussion and also enables the reader to flow with the author's discussion. A way to write a background study is shown below:

-background of study contd.-

- first you should give a general overview of the thesis topic and introduce the pivoting ideas you will be using throughout the thesis. This should take a paragraph.
- Then you provide detailed, precise information about the methodologies researched depending on individual and thesis topic, This could take several paragraphs
- To avoid plagiarism, cite your sources and resources
- Introduce your experiment after this by briefly describing the methodology used and the objective of this methodology. In other words, why this method and not the other?

INVESTIGATION OF CALL BLOCKING PROBABILITIES IN CELLULAR NETWORKS

A STUDY OF MTN NETWORKS

CHAPTER ONE

INTRODUCTION

1.1 Background of study

In cellular networks, coverage areas are divided into cells. Each cell is served by a base station consisting of transmitters, receivers and a control unit. These cells possess low power transmitters (100W or less) with which the cell area is covered. Cells are set up such that antennas of all neighbours are equidistant (hexagonal pattern) with different bands of frequencies allocated to each cell such that no two neighbouring cells use the same band of frequencies for communications. A user of the network is allocated a frequency channel from the available band of frequencies available to the cell. By this means, the user can have a dedicated link with the cell's base station.

-Contd-

However, the number of allocable frequencies are limited and hence create a limit to the total number of users that could connect to the network at any point in time.

If a new call arrives to the base station, it first checks for the availability of a free frequency channel. If a free channel is available, then this free channel is allocated for the call. If there is no free channel available, the call is blocked.

Call blocking can thus be defined as a state in which a group of telecommunication circuits are fully occupied and hence are unable to accept further calls.

CHAPTER TWO

LITERATURE REVIEW

Literature review is a study of other people's work in the field/ topic you are researching on. Your work is not 100% your creation. It is an improvement of so many other people's work. Literature review is a way of showing you are not repeating what has already been done but that you are improving on what is already obtainable.

CHAPTER THREE

SEMINAR TOPIC

In this area, you are expected to explain in details the topic of your seminar presentation.

CHAPTER FOUR

CONCLUSION

4.1 Conclusion

In this section you conclude the reporting of the seminar. Here, the contributions made by you through this seminar presentations are summarized.

REFERENCES

We use IEEE referencing and citation format for all undergraduate research, term paper, seminar, or project reporting in the department of Electrical and Electronic Engineering (FUTO).

The IEEE citation style has 3 main features:

- The author's name which is the first name (initials) and surname.
- The title of an article (or chapter, conference paper, patent etc.) is in quotation marks.
- The title of the journal or book is in italics.

-references contd-

Examples

A. Print References

Book

Author(s), *Book title*. Location: publishing Company, year, pp.

Example:

[1] W.K. Chen, *Linear Networks and Systems*. Belmont, CA: Wadsworth, 1993, pp. 123-135.

Book Chapters

Author(s), "Chapter title" in Book title, edition, volume. Editor's name, Ed. Publishing location: publishing Company, year, pp.

-references contd.-

Example:

[2] J.E. Bourne, "Synthetic structure of industrial plastics," *in Plastics*, 2nd ed., vol. 3. J. Peters, Ed. New York: McGraw-Hill, 1964, pp.15-67.

Article in a Journal

Author(s), "Article title," Journal title, vol., pp, date.

Example:

[3] S. O. Okozi, P.C Chukwudi and M. Olubiwe, "Reliability Assessment of Nigerian Power Systems Case Study of 330kv Transmission Lines in Benin Sub – Region," *International Journal of Engineering Research & Technology*, Vol. 7, Issue 03, pp 399-405, March 2018.

Articles from Conference Proceedings (published)

Author(s), "Article title," Conference proceedings, year pp.

Example:

[4] D.B. Payne and H.G. Gunhold, "Digital sundials and broadband technology," *in Proc. IOOC-ECOC*, 1986, pp. 557-998.

Papers Presented at Conferences (unpublished)

Author(s), “Paper’s title,” Conference name, Location, year.

Example:

[5] B. Brandli and M. Dick, “Engineering names and concepts,” presented at the 2nd Int. Conf. Engineering Education, Frankfurt, Germany, 1999.

Standards/Patents

Author(s)/Inventor(s), “Name/Title,” Country where patent is registered. Patent number, date.

Example:

[6] E.E. Rebecca, “Alternating current fed power supply,” U.S. Patent 7 897 777, Nov. 3, 1987.

Electronic References

Books

Author. (year, Month day). Book title. (edition). [Type of medium]. Vol. (issue).
Available: site/path/file [date accessed].

Example:

[7] S. Calmer. (1999, June 1). Engineering and Art. (2nd edition). [On-line]. 27(3).
Available: www.enggart.com/examples/students.html [May 21, 2003].

Journal

Author. (year, month), "Article title," Journal title. [Type of medium]. Vol. (issue),
pages. Available: site/path/file [date accessed].

Example:

[8] A. Paul. (1987, Oct.), "Electrical properties of flying machines," Flying Machines.
[Online]. 38(1), pp. 778-998. Available: www.flyingmachjourn/properties/fly.edu
[Dec. 1, 2003].

World Wide Web

Author(s), "Title," Internet: complete URL, date updated [date accessed].

Example:

[9] M. Duncan, "Engineering Concepts on Ice," Internet: www.iceengg.edu/staff.html, Oct. 25, 2000 [Nov. 29, 2003].

Odd Sources Newspaper

Author(s)*, "Article title," Newspaper (month, year), section, pages.

Examples:

[10] B. Bart, "Going Faster," Globe and Mail (Oct. 14, 2002), sec. A p.1. "Telehealth in Alberta," Toronto Star (Nov. 12, 2003), sec. G pp. 1-3.

Dissertations and Theses

Author, "Title," Degree level, school, location, year.

Example:

[11] S. Mack, "Desperate Optimism," M.A. thesis, University of Calgary, Canada, 2000.

Lecture

Lecturer. Occasion, Topic: “Lecture title,” Location, date.

Example:

[12] D.O Dike. PSE 511 Class Lecture, Topic: “Power System Load forecasting,” EEE lecture hall 1, SEET complex, Federal University of Technology Owerri, Nigeria, Jan. 30, 2018.

**End of the presentation
&
Time for questions**