VAAL UNIVERSITY OF TECHNOLOGY

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STUDY GUIDE

Faculty	Engineering and Technology
Department	Electrical Engineering: Power
Course	Diploma in Engineering
Title	Project report format – EPPRJ4A
Compiled By	I.K. Kyere
Year	2026
NQF Level	6
Credits	30

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FINAL PROJECT REPORT FORMAT FOR WORK PLACED BASED LEARNING (WBL)

PRELIMINARY PAGES

- **Cover / Title**

This page consists of the project title, which is stated in the upper half of the page. This is to be followed by the author's full name with the surname first, and others. Note that when the surname comes first, it is separated from the other names with a comma.

The lower part of the page is to have the statement that reads: 'A project presented to the Vaal University of Technology in partial fulfilment of the requirements for the award of the diploma of Electrical Engineering. The student shall indicate at the bottom of the page the month and year the project was completed (e.g. February 2023).

- **Certification**

On this page, the certification of the project mentor of the originality of the study as true work carried out by the student. The statements here shall read: This is to certify that this research project titled: "..... '', written by (Student surname and other names) with the student number under my supervision". Followed by the supervisor's name, signature, and date.

- **Dedication**

This page provides the author with the opportunity to express some words of gratitude to those dear to him/her one way or the other.

- **Acknowledgement**

This page provides the author with the opportunity to acknowledge the help and contribution of different people who directly or otherwise contributed to the success of the work.

- **Abstract**

Creating effective technical reports requires a specific framework and set of guidelines. A technical report is a written communication that conveys technical information. It should include a report title, author name, table of contents (for long reports), abstract, introduction, main body (subdivided into subsections like background, objectives, methodology or experimental setup, results, analysis, and discussion), conclusion, and references/bibliography.

The abstract should provide a complete summary of the entire report and include details about the study's objectives, methods, results, and conclusions. Typically, the abstract of a first-year report should be around 100 words in length. Writing the abstract is challenging and should be done last. It should be a standalone part of the report and written in a single paragraph without reference citations.

- **Table of Contents**

This page consists of the list of chapters and sub-units with their respective page numbers as contained in the main body of the work. The pages before the main body of the work are numbered in Roman numerals, while other pages are numbered in Arabic numerals. Other parts of the table of contents are:

- List of Tables
- List of Figures

CHAPTER ONE: INTRODUCTION

The introduction section is the first part of the main body of a report and is numbered as section 1. Its purpose is to provide a clear statement of the report's intention. For students' reports, which are usually experimental investigations, the introduction should state the problem being investigated and the reason for conducting the investigation. It should also provide the scope of the investigation and any relevant background information required to understand the report.

1.1 Background to the Project

Students are expected to describe in general terms the larger area of the problem being investigated. This will serve as the basis for introducing the problem. It will also be a way to establish a relationship that exists between the problem being investigated and the larger area of concern to people and organisations.

1.2 Statement of the Problem

The research study is to provide answers /solutions to identified problems. Students should be able to state the problem clearly and convincingly and justify/show the necessity to find a solution to it, as well as the implications of such a problem. If possible, this problem could be linked to a given theory or fact.

1.3 Main Objective and Specific Objectives of the Project

The author is expected to narrow the problem or state the problem in specific terms. The purpose of the study is to find a solution to the problem or find relationships between the problem and other problems by breaking the problem into its parts through exploration or analysis. Three (3) to four (4) specific statements (objectives) of what the project intends to do to achieve the main objective could be stated.

1.4 Significance of the Study

This section justifies the study and what will be contributed to knowledge by the study if successfully carried out. It allows the author to justify his/her attempt to solve the problem.

1.5 Scope of the Study

Delimitation or scope of the study enables the researcher to circumscribe his/her research within a manageable limit. It provides the researcher with the opportunity to explain the boundaries of the study and describe the aspect of a general /wide problem area covered, as well as what aspects will not be covered.

CHAPTER TWO: LITERATURE REVIEW

A literature review is a comprehensive analysis of existing research on a particular topic. It serves to summarise, synthesise, and critically evaluate scholarly work to provide a foundation for new research. By identifying patterns, gaps, and debates, it contextualises a study within the broader field of knowledge.

2.1 Introduction

This requires a brief outline of the works in this chapter

2.2 Subsection

In line with the assumption that the reader is basically competent in the field under discussion, but not necessarily an expert in the aspect of the report, suitable background material must be included. Any work done by other researchers in the field should be cited, and their results, if relevant, should be briefly discussed.

2.3 Subsections

The literature section may indeed comprise subsections as appropriate.

ADDITIONAL INFORMATION

2.4 Font

Use the Times New Roman font type with a font size of 11 or 12 pts. In some cases, however, smaller font sizes can be used in tables or diagram labels.

2.5 Logical flow

The report contents should unfold naturally from beginning to the end like water flowing down an inclined route. Even though in most cases the work being reported on would not have progressed smoothly, i.e. with lots of iterations and diversions, the report should be presented as though the work was a smooth-running process. It is an argument from premise to conclusion.

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CHAPTER THREE: PROJECT METHODOLOGY

The procedure followed in obtaining the results must be fully described in a concise and logical manner.

3.1 Introduction

This requires a brief outline of the works in this chapter

3.2 Research Design

This has to do with the blueprint of the project that points the way to what should be expected.
It shows the project design adopted for the study and why.

3.3 Method of Data Analysis

The method of data analysis should consist of the basic elements of data preparation, tabulation, and analysis. It should contain the breakdown and ordering of the quantitative information gathered through the research.

3.4 Limitation of the Methodology

Relevant observed extraneous circumstances or imperfections encountered in sampling from the design, etc., should be stated as limitations to the methodology

3.5 Presentation and Analysis of Data

The data collected are to be presented and analysed. Students will have to choose the methods that best suit the data collected. Data could be presented using tables, pie charts, bar charts, histograms, etc. Data presented should be accompanied by the interpretation of the associations and relationships among the data groups with the appropriate implication to the study or the unit of study. The summary of the interpretation should provide answers to the research questions.

3.6 Discussion of Finding

Discuss your findings and identify the implications of the study

CHAPTER FOUR: CONCLUSION AND RECOMMENDATIONS

4.1 Conclusions

Conclusions should be drawn from the findings

4.2 Recommendations

Recommendations should also be based on the conclusions

References (Harvard reference style)

Appendix

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DEPARTMENT OF ELECTRICAL (POWER) ENGINEERING

FINAL ASSESSMENT OF GA

GRADUATE ATTRIBUTE 12: WORKPLACE PRACTICES

SUBJECT: WORKPLACE-BASED LEARNING

STUDENT NAME: …….……. STUDENT NO.: ……

DATE: ……..

GRADUATE ATTRIBUTE 12: WORKPLACE PRACTICES

Learning outcome: Demonstrate an understanding of workplace practices to solve engineering problems consistent with academic learning achieved. • The balance of investigation and experiment should be appropriate to the discipline. An investigation or experimental study should be typical of those in which the graduate would participate in an employment situation shortly after graduation.	
Where is the outcome assessed?	In the final Workplace project report.
How is this outcome assessed?	Students are required to produce a report that is **verified by a mentor** illustrating the ability to develop, build and configure power engineering principles, in which workplace-based learning takes place.
What is satisfactory performance?	Within the report, the student must comply with conducting a proper investigation and experiment to uncover the required information. The student should reflect the following in the report: define the scope, methodology, and literature review, analyse the results, draw conclusions, provide possible solutions (outcome if experimental), and report on the work in writing, keeping in mind to use appropriate methods/tools. Include a portion of data/data analysis in the literature review. This graduate attribute is assessed by a comprehensive four (4) level rubric where a minimum set of outcomes must be met to prove competency. Assessment is done as Poor - student does not comply at all, Borderline - may comply with corrections, Competent - min to moderate compliance is met, exceed expectation – max compliance is met. To comply, all the criteria must be met with minimum compliance using the assessment rubric. Analysis of the need for the experiment is performed. Students understand the purpose of experimental work. Students can plan for effective projects and 1. Select appropriate equipment/software for use in the investigation/experimental work.

	Able to identify appropriate tools to conduct investigations with a few mistakes. 2. Able to connect and conduct an experiment using laboratory leads and equipment without or with very minimal assistance.

	3. Information is analysed, interpreted, and derived from available data. Conducts simple computations/analyses using collected data with minor errors. Alternatively, reasonably correlates experimental results to known theoretical values and attempts to account for measurement errors and parameters that affect the outcome of results. 4. Conclusions are drawn from an analysis of all available evidence. The conclusion is presented as at least one full paragraph based on findings from the investigation/ experiment. Is logical has flow well and leads to future work. 5. The purpose, process and outcomes of the investigation are recorded in a technical report. The report is reasonably well documented. May lack some minor aspects. Most of the characteristics of desirable features are included. Material is binded.
What is the consequence of unsatisfactory performance?	Meeting this attribute is essential in passing Workplace Based Learning. Non-compliance means failure, even if the combined mark for all the summative assessments results in a pass. Students who fail to meet one criterion or more criteria will be given a second chance, with deadlines to comply with all the criteria for the GA. If, after the second chance, the student does not comply with all the criteria, he/she will fail the module, and the results will in this case reflect 'Fail to meet GA 12.

RUBRICS FOR PROJECT REPORT

Note: 0-40% = 1-4, 50-70% = 5-7, 80-100% = 8-10,

ECSA Graduate Attribute	**Candidate's Surname & Initials**	**Not comply**	**Satisfactory to Excellent**				
		(1-4)	(5-7)	(8-10)		Multiplying factor	Max mark
		Demonstrates a minimal level of understanding of the problem, literature review with references (<5), and ability to use data for analysis and interpretation.	Demonstrates an adequate level of An understanding of the problem, a literature review with references (at least 5), and the ability to use data for analysis and interpretation.	Demonstrates a high level of understanding of the problem, literature review with references (>5), and ability to use data for analysis and interpretation.			
	Ch1 How does the candidate logically lead the reader toward the problem to be investigated? |_| Is the problem clearly stated or defined giving the research a central structure? |_|					X1.75	
	Ch2 Does the candidate demonstrate a clear understanding of the issues that are at stake? |_| Does he/she know what others have written about this area and field of investigation? (Literature review) |_| Does he/she know what sort of conclusions they have come to? |_| Does he/she know what methods they have used to come to those conclusions? |_|					X1.75	

	SUB- TOTAL MARKS	Pass …….. or Fail……. (tick)	/35

	Ch3 Does the candidate give a very detailed account of the exact experimental conditions, components, and equipment used to do the experimental research? |_| Would others be able to follow the account and get the same results? |_| Is the application of the process (method) of research to this research project convincingly described, i.e. does the candidate understand and effectively apply the method? |_|					X1.5	
	Ch4 Are all the results obtained interpreted by the candidate? |_| How accurate are the results? |_| How much effort was made to validate the accuracy of the results? |_|Does an objective reading of these results lead to potential answers to the research question? |_|					X1.5	
	Ch4 Does the candidate deal with the implications of the interpretation of the results? |_| Does the candidate demonstrate what the bearings are that the results have on the field of inquiry? |_| Does the candidate suggest further topics of research for other researchers? |_|					X1.5	
	Logical Development: Does the candidate demonstrate that he/she has control of the "rhetoric of research" or the process of making an argument and convincing the reader of the results? |_| Does the structure of the document support this? |_|						
	SUB-TOTAL MARKS	Pass …….. or Fail……. (tick)				/45	

	Is the report structured and presented in a quality consistent with best-practice scholarly journal articles?					X1.2	

	Is the presentation clear and professionally laid out? Are the slides and use of media well executed?					X0.8	
	SUB-TOTAL MARKS	Pass …….. or Fail……. (tick)					/20
OVERALL TOTAL **Note: Any failure of a GA caps the overall mark to 45% if the overall mark is equal to or greater than 50%**						**/100**	

			NAME	SIGNATURE	DATE
GA12 Compliant	**YES**				
		WIL CO-ORDINATOR			
	NO	**MODERATOR**			