HLUVUKANIe LABs

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING TRAINING (DEEET)

SCHOOL OF SOLAR ENERGY

STUDY GUIDE FOR

QUALIFICATION: Computer and Smartphone Literacy
COURSE CODE: CSL01
COURSE DURATION: One day
COURSE CREDITS: NIL

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Dr. N.E Mabunda

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1. INTRODUCTION

Welcome to the Short Learning Program (SLP) for Computer and Smartphone Literacy.
This short course is aimed to enhance the knowledge of candidates in computer equipment, smart phones and tablets. The candidates are required to have a prior knowledge in the usage of smart phones as well as computers. The course will not dwell onto basics of computers such as booting up, rebooting, operation of peripherals such as mice and touch screens. In the course students will explore various applications that featured by smartphones or computers and Microsoft office tools such as word, excel, publisher. Cloud computing and file sharing is also the phenomena that will be evaluated in this course.

Short history of computing

The field of computing seem to grow in an exponential manner. In the early nighties, computer users were running most of their applications under disc operating system (DOS). In those times of DOS, a storage capacity of 744 kB was a luxury. In the mid nighties, storage capacity was improved a couple of megabytes and we then saw the introduction of windows 1 that was later followed by windows NT and windows 95. Portable disk storage system was also raised to 1. 44Mb.From the days of DOS until the development of windows 95, transmissions protocols were supported by RS232 and RS485 protocols. In the beginning of the 20th century, windows XP and universal serial bus (USB) were introduced. As we slowly approach the end of the first quarter of the 20th century, we now use the likes of windows 11, cloud computing with capability to provide storage of several terra bytes. Transmission can now be executed through WIFI and LANs that support high speeds. Fifth generation networks, which supports exemptional high transmission speeds have now been implemented. A pocket-sized smart phone has now capabilities to process information that could done by computers that filled up an entire office.

2. GENERAL INFORMATION

This course will be provided in a form of workshop, no certificate will be issued.

Queries related to this course may be directed via WhatsApp **or physical call.**

Your instructor is Dr. Nkateko E Mabunda, Cellphone no: +2784 535 3108

3. PROGRAMMEME DEFINITION

SLP NAME : Computer and Smartphone Literacy

CODE : CSL01

NQF LEVEL : NIL

MODULE PRE-REQUISITE : Prior computer knowledge

MODULE DURATION : 8 HOURS

MODULE RANGE : The course will enhance the knowledge and skills of candidates in the area of end user computing, cloud computing and smartphone applications.

PRE-KNOWLEDGE: : The learner is expected to posses a prior knowledge in computing equipment that include smart phones.

TEACHING AND
LEARNING STRATEGIES : The program is presented as a workshop. No certificates are issued. There will also be no formal assessments.

Books : Notes

4. GENERIC ENGINEERING STANDARDS

The following standards will be used in the presentation of this module:

- Proven Engineering philosophies, principles, processes, procedures and practices
- Industrial norms and standards and manufacturer specifications
- SABS Quality standards and parameters
- Occupational Health and Safety Act
- Quality assurance norms as established by HEQC and internal university assurance policies
- Quality assurance norms as established by The Engineering Council of South Africa (ECSA)
  Please adhere to all covid-19 regulations

5. UNITS OF LEARNING

Unit (duration)	Syllabus	Reference
Computer hardware, peripherals and software (2 hour)	On completion of this unit, the candidate will be able to: ▪ Describe computer hardware architecture, ▪ understand various operating systems and their significance, ▪ describe windows and android based applications and ▪ explore the use of various cloud tools.	Notes
Standard windows and android based applications (3 hours)	On completion of this unit, the candidate will be able to: ▪ create a cash analysis tools in excel, ▪ , develop tags in MS publisher or MS word, ▪ compile presentations on power point, ▪ share files via Bluetooth and ▪ exchange files through the local area networks.	Notes
Cloud computing (3hrs)	On completion of this unit, the candidate will be able to: ▪ create email account on a google platform, ▪ generate google form, ▪ setup drop box account, ▪ sync drop box and email accounts to a smart phone and ▪ understand advantages of various social networks platforms with their associated risks	Notes

6. ASSESMENT DETAILS

No formal assessment will be carried out