

MODULE 1

By the end of this module unit, the trainee should able to utilise computer applications, apply communication skills, apply programming techniques to solve problems, solve mathematical computation, appreciate the role of an OS and apply Entrepreneurship skills in day to day activities

Topics

1. Introduction to ICT and ethics
2. Computer application I
3. Communication Skills
4. Structured programming
5. Computational mathematics

7.1.1. INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY AND ETHICS (150 HOURS)

7.1.1.01: INTRODUCTION

This module unit is intended to introduce the trainee to Information Communication Technology, equipping him/her with the necessary knowledge, skills and attitude to enable him/her professionally work with ICT facilities

7.1.1.02: GENERAL OBJECTIVES

By the end of this module unit, the trainee should be able to:-

- a) appreciate the role of ICT in contemporary society
- b) appreciate the ethical and legal implication in the use of ICT
- c) appreciate and uphold professional and life skills in the society

7.1.1.03: COURSE SUMMARY AND TIME ALLOCATION -150 HOURS

CODE	TOPIC	SUB-TOPIC	TIME		TOTAL
			T	P	

7.1.1.1	INTRODUCTION TO ICT	<ul style="list-style-type: none"> • meaning of ICT • uses of ICT in organizations • ICT equipment / facilities • impact of ICT in contemporary society 	4	0	4
7.1.1.2	INTRODUCTION TO COMPUTERS	<ul style="list-style-type: none"> • meaning and importance of a computer • historical evolution of computers • classification of computers • components of a computer • uses of computers <ul style="list-style-type: none"> - benefits - challenges 	4	2	6
7.1.1.3	COMPUTER HARDWARE AND ORGANIZATION	<ul style="list-style-type: none"> • computer hardware devices <ul style="list-style-type: none"> - central processing unit - input devices - output devices - storage devices - bus system 	12	4	16
7.1.1.4	COMPUTER SOFTWARE	<ul style="list-style-type: none"> • meaning and importance of computer software • classification of computer software • software Installation 	2	8	10
7.1.1.5	HARDWARE-SOFTWARE SELECTION AND ACQUISITION	<ul style="list-style-type: none"> • meaning and importance • factors considered • procedures • methods 	4		4
7.1.1.6	COMPUTER PERSONNEL	<ul style="list-style-type: none"> • roles and skills of computer personnel 	2		2
7.1.1.7	COMPUTER SAFETY AND ERGONOMICS	<ul style="list-style-type: none"> • meaning and importance • the safety of computer system • ergonomics 	4	2	6

CODE	TOPIC	SUB-TOPIC	TIME	TOTAL
			T P	

7.1.1.8	INTRODUCTION TO COMMUNICATION NETWORKS	<ul style="list-style-type: none"> • meaning and importance of communication network • types of communication tools/technologies • types of networks 	4	2	6
7.1.1.9	ICT ETHICS AND LEGISLATIONS	<ul style="list-style-type: none"> • meaning and importance of ethics for ICT • ethical challenges in ICT <ul style="list-style-type: none"> - types - reasons - control measures • meaning and importance of ICT legislations • sources of ICT legislation • ICT legislations and policies issues • enforcement measures for ICT legislation and policies 	12		12
7.1.1.10	LIFE SKILLS	<ul style="list-style-type: none"> • meaning and importance of life skills • type of Life skills <ul style="list-style-type: none"> - time management- self awareness - self esteem - emotions and stress management - people skills- others 	6	2	8
7.1.1.11	CONFLICT MANAGEMENT	<ul style="list-style-type: none"> • meaning of conflict • importance of managing conflicts • types of conflicts • causes of conflicts • techniques or approaches to conflict management 	6		6
CODE	TOPIC	SUB-TOPIC	TIME		TOTAL
			T	P	

7.1.1.12	SOCIAL RESPONSIBILITY IN ICT	<ul style="list-style-type: none"> • meaning and importance of social responsibility • social responsibilities in ICT • environmental protection • confidentiality and privacy • others • challenges of social responsibility in ICT 	4	2	6
7.1.1.13	EMERGING TRENDS IN ICT AND ETHICS	<ul style="list-style-type: none"> • emerging trends in ICT and ethics • challenges of emerging trends in ICT and ethics • coping with the challenges of emerging trends in ICT and ethics 	4		4

7.1.1.1T INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY (ICT)

THEORY

7.1.1.1.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- explain the meaning of ICT
- explain the uses of ICT
- describe ICT equipment / facilities found in organisations
- explain the impact of ICT in contemporary society

CONTENT

7.1.1.1.T1 Meaning of ICT

7.1.1.1.T2 Uses of ICT

7.1.1.1.T3 ICT equipment / facilities found in organizations
 computers photocopiers
 telephone / fax machines
 printers others

7.1.1.1.T4 Impact of ICT in contemporary society

7.1.1.2T INTRODUCTION TO COMPUTERS

7.1.1.2.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- explain the meaning and importance of a computer
- describe the components of a computer

- c) describe computer hardware
- d) describe computer software
- e) explain the historical evolution of computers
- f) describe the classification of computers
- g) explain the benefits and challenges of computers

CONTENT

- 7.1.1.2.T1** Meaning and importance of a computer
- 7.1.1.2.T2** Historical evolution of computers
- 7.1.1.2.T3** Computer components
 - computer hardware
 - computer Software
- 7.1.1.2.T4** Classification of computers
 - super computers
 - mainframe computers
 - micro computers
 - mini computers
- 7.1.1.2.T5** Benefits and challenges in the use of computers

PRACTICE

- 7.1.1.2.P0** **Specific Objectives**
 By the end of this topic, the trainee should be able to:-
 - a) identify various components of a computer
 - b) assemble computer components for use on a standalone computer

CONTENT

- 7.1.1.2.P1** Trainee to physically identify the components of a computer
- 7.1.1.2.P2** Trainee to set up a computer system for use as a standalone computer

7.1.1.3T COMPUTER HARDWARE AND ORGANISATION

THEORY

- 7.1.1.3.T0** **Specific Objectives**
 By the of this topic, the trainee should be able to:-
 - a) describe computer hardware devices

- 7.1.1.3.T1** Computer hardware devices

input devices output
devices central
processing unit storage
devices bus system
others

PRACTICE

7.1.1.3.P0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) identify various computer hardware devices
- b) disassemble and correctly reassemble a computer

CONTENT

7.1.1.3.P1 Trainee to identify various computer hardware devices

7.1.1.3.P2 Trainee disassembles and correctly re-assembles a computer

7.1.1.4T COMPUTER SOFTWARE

THEORY

7.1.1.4.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) explain the meaning and importance of computer software
- b) describe the classification of computer software

CONTENT

7.1.1.4.T1 Meaning and importance of computer software

7.1.1.4.T2 Classification of computer software

system software

- operating systems
- housekeeping software application software

PRACTICE

7.1.1.4.P0 Specific Objective

By the end of this topic, the trainee should be able to:-

- a) correctly install and configure computer software

CONTENT

7.1.1.4.P1 Trainee to correctly install and configure computer software
operating system – Windows, Linux, Unix, others application

software – MS office, open office, others housekeeping
software – anti-virus software, others

7.1.1.5T **HARDWARE, SOFTWARE SELECTION AND ACQUISITION**

THEORY

7.1.1.5.T0 **Specific Objectives**

By the end of this topic, the trainee should be able to:

- a) explain the meaning and importance of hardware, software selection and acquisition
- b) describe factors considered in selection and acquisition
- c) highlight procedure of selection and acquisition
- d) describe methods of selection and acquisition

CONTENT

- 7.1.1.5.T1** Meaning and importance of hardware and software selection and acquisition
- 7.1.1.5.T2** Factors considered in hardware and software selection and acquisition
- 7.1.1.5.T3** Procedure of selection and acquisition of hardware and software
- 7.1.1.5.T4** Methods of hardware and software acquisition and selection

7.1.1.6T **COMPUTER PERSONNEL**

THEORY

7.1.1.6.T0 **Specific Objective**

By the end of this topic, the trainee should be able to:-

- a) describe the roles and skill requirements expected of various computer personnel

CONTENT

- 7.1.1.6.T1** Roles and skills requirements of various computer personnel
 - computer programmers
 - system analysts system
 - designers others

7.1.1.7T **COMPUTER SAFETY AND ERGONOMICS**

THEORY

7.1.1.7.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) describe the meaning and importance of computer safety and ergonomics
- b) describe computer safety
- c) explain computer ergonomics

CONTENT

7.1.1.7.T1 Meaning and importance of computer safety and ergonomics

7.1.1.7.T2 Computer safety
 hardware safety
 software safety data
 safety

7.1.1.7.T3 Computer ergonomic

PRACTICE

7.1.1.7.P0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) demonstrate ergonomic use of computers

CONTENT

7.1.1.7.P1 Trainee to demonstrate ergonomic use of computers

7.1.1.8T INTRODUCTION TO COMMUNICATION NETWORK

THEORY

7.1.1.8.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) explain the meaning of a communication network
- b) explain the uses and benefits of communication network
- c) describe telecommunication technologies
- d) describe the types of networks
- e) describe network topologies

CONTENT

7.1.1.8.T1 Meaning of a communication network

7.1.1.8.T2 Uses and benefits of communication networks

7.1.1.8.T3 Telecommunication technology

7.1.1.8.T4 Types of network

7.1.1.8.T5 Network topologies

7.1.1.9T ICT ETHICS AND LEGISLATIONS

THEORY

7.1.1.9.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) explain the meaning and importance of ICT ethics
- b) describe unethical behaviour in ICT
- c) explain reasons for unethical behaviour in ICT
- d) explain the measures for controlling unethical behaviour in ICT
- e) explain the sources of ICT legislations
- f) describe ICT legislations and policies
- g) explain enforcement measures for ICT legislation and policies

CONTENT

7.1.1.9.T1 Meaning and importance of ICT ethics

7.1.1.9.T2 Unethical behaviour in ICT
software piracy
unauthorized access others

7.1.1.9.T3 Reasons for unethical behaviour in ICT

7.1.1.9.T4 Measures for controlling unethical behaviour in ICT

7.1.1.9.T5 Sources of ICT legislations

7.1.1.9.T6 ICT legislations and policies
ICT policy
Data Protection
Copyright Information
Privacy others

7.1.1.9.T7 Enforcement measures for ICT legislation and policies

7.1.1.10T LIFE SKILLS

THEORY

7.1.1.10.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) explain the meaning and importance of life skills
- b) describe life skills

CONTENT

7.1.1.10.T1 Meaning and importance of life skills

7.1.1.10.T2 Life skills

time management self awareness
self esteem emotions and stress
management people skills others

7.1.1.11T CONFLICT MANAGEMENT

THEORY

7.1.1.11.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) explain the meaning of conflict
- b) explain the importance of conflict management
- c) describe the types of conflicts
- d) explain the causes of conflicts
- e) describe the techniques of managing conflicts

CONTENT

7.1.1.11.T1 Meaning of conflict

7.1.1.11.T2 Importance of conflict management

7.1.1.11.T3 Types of conflicts

workplace conflicts family
or domestic conflicts others

7.1.1.11.T4 Causes of conflicts

workplace family

7.1.1.11.T5 Techniques or approaches of managing conflicts

preventive reactive

7.1.1.12T SOCIAL RESPONSIBILITY IN INFORMATION COMMUNICATION TECHNOLOGY (ICT)

THEORY

7.1.1.12.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) explain the meaning and importance of social responsibility
- b) describe social responsibilities in ICT
- c) explain the challenges of social responsibility in ICT

CONTENT

- 7.1.1.12.T1** Meaning and importance of social responsibility
Social responsibilities in ICT
- 7.1.1.12.T2** environmental protection
confidentiality and privacy
- 7.1.1.12.T3** Challenges of social responsibility in ICT

7.1.1.13T EMERGING TRENDS IN ICT AND ETHICS

THEORY

7.1.1.13.T0 Specific Objectives

By the end of this topic, the trainee should be able to:-

- a) identify emerging trends in ICT and ethics
- b) explain the challenges and opportunities of emerging trends in ICT and ethics
- c) cope with the challenges of emerging trends in ICT and ethics

CONTENT

- 7.1.1.13.T1** Emerging trends in ICT and ethics
- 7.1.1.13.T2** Challenges and opportunities of emerging trends in ICT ethics
- 7.1.1.13.T3** Coping with the challenges of emerging trends in ICT and ethics

TEACHING/LEARNING RESOURCES

- A computer system peripheral devices
- Operating system and application software

- Ms Windows, Linux, and any of the application
- Whiteboard
- Relevant text books and free e-books
- Online content ([www. howstuffworks.com](http://www.howstuffworks.com), [www.wikipedia.com...](http://www.wikipedia.com))

ASSESSMENT MODE

- Written Tests
- Practical tests
- Projects