

USE ICT DEVICES

UNIT CODE: IT/CU/ICTA/CR/01/4/B

UNIT DESCRIPTION

This unit covers the competencies required to understand the concepts of Information Communication Technology. They involve identifying computer components, operating a computer, understand information networks, identifying applications of ICT, identifying healthy, safety and environmental issues in ICT and identifying ICT security issues.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA <i>(Bold and italicised terms are elaborated in the Range)</i>
1. Identify computer components	1.1 Various <i>hardware devices</i> are identified according to the manufacturer's specifications 1.2 Functions of the hardware devices are described 1.3 Documentation of the hardware devices is done as per the manufacturer's specification. 1.4 Definition of application and <i>operating system</i> software terminologies is done 1.5 Types of application software are identified 1.6 Functions of the application and operating system software are outlined
2. Operate a computer	2.1 Switching on and off procedures is demonstrated. 2.2 Navigation and personalization of the windows operating system is done as per the operation manual 2.3 Basic file management operations are performed
3. Understand computer networks	3.1 Definition of computer networks is done 3.2 <i>Components</i> of computer networks are identified according to organization structure. 3.3 Terminologies used in computer networks are explained. 3.4 <i>Types of computer networks</i> are identified. 3.5 Applications of computer networks are outlined
4. Identify applications of ICT	4.1 Applications of ICT in various sectors is outlined 4.2 Merits, opportunities and challenges of ICT application are identified. 4.3 Emerging trends in ICT outlined

5. Identify healthy, safety and environmental issues in ICT	5.1 ICT risk <i>elements</i> are identified 5.2 Standards and guidelines for health, safety and environment are outlined 5.3 Opportunities of green ICT are identified.
6. Identify ICT security issues	6.1 ICT <i>assets</i> to be secured are identified 6.2 Goals of ICT security is outlined 6.3 Types of <i>security threats</i> are identified 6.4 Controls to security threats are outlined

RANGE

This section provides work conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range
1. Hardware devices May include but not limited to:	<ul style="list-style-type: none"> • Printer • Mouse • Keyboard • Monitor • Desktops/laptops
2. Operating system may include but not limited to:	<ul style="list-style-type: none"> • Microsoft windows • Mac OS • Linux
3. Types of networks May include but not limited to:	<ul style="list-style-type: none"> • WAN • LAN • WLAN • MAN
4. Security threats may include but not limited to	<ul style="list-style-type: none"> • Virus • Malware • Hackers
5. Assets may include but not limited to	<ul style="list-style-type: none"> • Data • Information • Media • Hardware • Software

REQUIRED KNOWLEDGE AND UNDERSTANDING

The individual needs to demonstrate knowledge and understanding of:

1. Computer systems and their components
2. Functions of operating system
3. Types of application software
4. Types of computer networks
5. Opportunities of and application areas in ICT
6. Health, safety and environmental issues in relation to ICT
7. ICT security threats

REQUIRED SKILLS

The individual needs to demonstrate the following additional skills:	
<ul style="list-style-type: none"> • Communications (verbal and written); • Time management; • Analytical; • Problem solving; • Planning; 	<ul style="list-style-type: none"> • Decision making; • Report writing;

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and understanding and range.

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1 Identified computer hardware devices according to the manufacturer's specifications. 1.2 Demonstrated switching on and off procedures 1.3 Identified types and functions of application software 1.4 Outlined functions of operating system 1.5 Demonstrated navigation and personalizing of the windows Operating system 1.6 Identified types and functions of computer networks 1.7 Identified opportunities of and applications areas in ICT. 1.8 Outlined possible ICT security threats and controls. 1.9 Highlighted health, safety and environmental issues related to ICT use.
2. Resource Implications	<p>Resources the same as that of workplace are advised to be applied Including computer, printers, software (operating system, office tools, network management tools), network components and devices etc.</p>

3. Methods of Assessment	<p>Competency may be assessed through:</p> <p>3.1 Oral questioning</p> <p>3.2 Practical demonstration</p> <p>3.3 Observation</p> <p>3.4 Written test</p>
4. Context of Assessment	4.1 Competency may be assessed individually in the actual workplace or through simulated work environment
5. Guidance information for assessment	5.1 Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.