



**REPUBLIC OF KENYA**

**NATIONAL OCCUPATIONAL STANDARDS**

**FOR**

**ELECTRICAL INSTALLATION ARTISAN**

**KNQF LEVEL 4**

**ISCED OCCUPATIONAL STANDARD CODE:07130454B**



**TVET CDACC  
P.O BOX 15745-00100  
NAIROBI**

## APPLY DIGITAL LITERACY

TVET CDACC UNIT CODE: ENG/OS/EI/BC/01/4/B

### UNIT DESCRIPTION:

This unit covers the competencies required to demonstrate digital literacy. It involves operating computer devices, solving tasks using computer devices and applying cybersecurity skills and job entry techniques.

### ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes that make up workplace functions	These are assessable statements which specify the required level of performance for each of the elements  <i>(Bold and italicized terms are elaborated in the range)</i>
1. Operate computer devices	1.1 <b>Computer device</b> usage is determined in accordance with workplace requirements. 1.2 <b>Computer hardware and software</b> is identified according to job requirements. 1.3 Computer devices are turned on or off as per the correct workplace procedure. 1.4 <b>Mouse techniques</b> are applied in solving tasks as per workplace requirements. 1.5 Keyboard techniques are applied in solving tasks as per workplace requirements. 1.6 Computer files and folders are created and managed as per scope of work. 1.7 <b>Internet connection options</b> are identified and applied in connecting computer devices to the internet. 1.8 <b>External devices</b> are identified and connected to the computer devices as per the job requirement.
2. Solve tasks using computer devices	2.1 <b>Word processing concepts</b> are applied in solving workplace tasks as per job requirements. 2.2 Netiquette principles are observed as per work requirements. 2.3 Internet search is performed using clear parameters as per job requirements.

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3. Apply cybersecurity skills	<p>2.4 Electronic mail communication is executed in accordance with workplace policy.</p> <p>3.1 <b><i>Cyber security threats</i></b> are identified as per workplace policies and regulatory requirements.</p> <p>3.2 <b><i>Cybersecurity control measures</i></b> are applied in accordance with workplace policies and regulatory requirements.</p> <p>3.3 <b><i>Computer threats and crimes</i></b> are detected and managed as per information security management guidelines.</p>
4. Apply job entry techniques	<p>4.1 <b><i>Job opportunities</i></b> are searched based on competencies.</p> <p>4.2 A winning resume/CV is developed as per job advertisement.</p> <p>4.3 An application/cover letter is developed based on the job advertisement.</p> <p>4.4 <b><i>certificates and testimonials</i></b> are organized as per resume.</p> <p>4.5 <b><i>Interview skills</i></b> are demonstrated as per job advertisement.</p>

## RANGE

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

Variable	Range
1. Computer devices may include but not limited to:	<ul style="list-style-type: none"> <li>● Desktops</li> <li>● Laptops</li> <li>● Smartphones</li> <li>● Tablets</li> <li>● Smartwatches</li> </ul>
2. Computer hardware may include but not limited to:	<ul style="list-style-type: none"> <li>● The System Unit E.g. Motherboard, CPU, casing,</li> <li>● Input Devices e.g. Pointing, keying, scanning, voice/speech recognition, direct data capture devices.</li> <li>● Output Devices e.g. hardcopy output and softcopy output</li> </ul>

Variable	Range
	<ul style="list-style-type: none"> <li>● Storage Devices e.g. main memory e.g. RAM, secondary storage (Solid state devices, Hard Drives, CDs &amp; DVDs, Memory cards, Flash drives)</li> <li>● Computer Ports e.g. HDMI, DVI, VGA, USB type C etc.</li> </ul>
3. Computer software may include but are not limited to:	<ul style="list-style-type: none"> <li>● System software e.g. Operating System (Windows, Macintosh, Linux, Android, iOS)</li> <li>● Application Software (Word Processors).</li> <li>● Utility Software e.g. Antivirus programs</li> </ul>
4. External devices may include but not limited to:	<ul style="list-style-type: none"> <li>● Printers</li> <li>● Projectors</li> <li>● Smart Boards</li> <li>● Speakers</li> <li>● External storage drives</li> <li>● Digital/Smart TVs</li> </ul>
5. Word processing concepts may include but not limited to:	<ul style="list-style-type: none"> <li>● Creating word documents</li> <li>● Editing word documents</li> <li>● Formatting word documents</li> <li>● Save word documents</li> <li>● Printing word documents</li> </ul>
6. Mouse techniques may include but not limited to:	<ul style="list-style-type: none"> <li>● Clicking</li> <li>● Double-clicking</li> <li>● Right-clicking</li> <li>● Drag and drop</li> </ul>
7. Internet connection options may include but not limited to:	<ul style="list-style-type: none"> <li>● Mobile Networks/Data Plans</li> <li>● Wireless Hotspots</li> <li>● Cabled (Ethernet/Fiber)</li> <li>● Satellite</li> </ul>
8. Data security and privacy may include but not limited to:	<ul style="list-style-type: none"> <li>● Confidentiality of data/information</li> <li>● Integrity of data/information</li> <li>● Availability of data/information</li> </ul>
9. Internet security threats may include but not limited to:	<ul style="list-style-type: none"> <li>● Malware attacks</li> <li>● Social engineering attacks</li> <li>● Password attacks</li> <li>● <a href="#"><u>Phishing Attacks</u></a></li> </ul>

Variable	Range
10. Security threats control measures may include but not limited to:	<ul style="list-style-type: none"> <li>● Counter measures against cyber terrorism</li> <li>● Physical Controls</li> <li>● Technical/Logical Controls</li> <li>● Operational Controls</li> </ul>
11. Computer threats and crimes measures may include but not limited to:	<ul style="list-style-type: none"> <li>● Malware</li> <li>● Spyware</li> <li>● Botnets</li> <li>● Identity theft</li> <li>● Phishing</li> <li>● Fraud</li> <li>● Hacking</li> <li>● Cyberstalking and Cyberbullying</li> </ul>
12. Job opportunities may include but not limited to:	<ul style="list-style-type: none"> <li>● Self employment</li> <li>● Service provision</li> <li>● product development</li> <li>● salaried employment</li> </ul>
13. Certificates and testimonials may include but not limited to:	<ul style="list-style-type: none"> <li>● Academic credentials</li> <li>● Letters of commendations</li> <li>● Certification of participations</li> <li>● Awards</li> </ul>
14. Interview skills may include but not limited to:	<ul style="list-style-type: none"> <li>● Listening skills</li> <li>● Grooming</li> <li>● Language command</li> <li>● Articulation of issues</li> <li>● Body language</li> <li>● Time management</li> <li>● Honesty</li> <li>● Generally knowledgeable in current affairs and technical area</li> </ul>

## REQUIRED KNOWLEDGE AND SKILLS

This section describes the knowledge and skills required for this unit of competency.

### Required knowledge

The individual needs to demonstrate knowledge of:

- Computer Hardware and Software Concepts

- Computer security threats and control measures
- Understanding Computer Crimes
- Laws governing protection of ICT in Kenya
- Netiquette Principles
- Word processing;
  - ❖ Functions and concepts of word processing;
  - ❖ Documents and tables creation and manipulations;
  - ❖ Document editing;
  - ❖ Document formatting;
  - ❖ Word processing utilities
- Networking and Internet;
  - ❖ Internet Fundamentals.
  - ❖ Browser management;
  - ❖ Electronic mail and World Wide Web
- Fundamentals of cybersecurity
- Types of Computer Crimes
- techniques of job application

### **Required skills**

The individual needs to demonstrate the following skills:

- Active listening
- Keyboard Skills
- Mouse Skills
- Creativity
- Communication
- Computer Use Safety Skills
- Document Editing Skills
- Document Formatting Skills
- Document Printing Skills
- Netiquette Skills
- Internet Browsing Skills
- Problem Solving Skills
- Online Security Skills
- Interviewee skills
- Time management

### **EVIDENCE GUIDE**

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

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1. Created and managed Computer files and folders as per scope of work.</li> <li>1.2. Solved tasks using word processing as per scope of work.</li> <li>1.3. Identified and controlled cybersecurity threats as per work policies and procedures.</li> <li>1.4. Detected and managed Computer threats and crimes as per information security management guidelines.</li> <li>1.5. Searched for job opportunity based on competencies.</li> <li>1.6. Prepared job requirement documentations based on job opportunity.</li> <li>1.7. Demonstrated interview skills based on the job opportunity.</li> </ul>
<p>2. Resource implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> <li>2.1 Appropriately simulated environment where assessment can take place.</li> <li>2.2 Access to relevant work environments.</li> <li>2.3 Resources relevant to the proposed activities or task.</li> </ul>
<p>3. Methods of assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1 Observation</li> <li>3.2 Oral assessment</li> <li>3.3 Portfolio of evidence</li> <li>3.4 Interviews</li> <li>3.5 Third party report</li> <li>3.6 Written assessment</li> <li>3.7 Project</li> </ul>
<p>4. Context of assessment</p>	<p>Competency may be assessed:</p> <ul style="list-style-type: none"> <li>4.1 On the job</li> <li>4.2 In a simulated work environment.</li> </ul>
<p>5. Guidance information for assessment</p>	<p>Holistic assessment with other units relevant to the industry sector and workplace job role is recommended.</p>