

## DIGITAL LITERACY

**ISCED UNIT CODE:** 0611 551 07A

**TVET CDACC UNIT CODE:** HO/CU/HP/BC/01/5/MA

### **Relationship to Occupational Standards**

This unit addresses the unit of competency: **Apply Digital Literacy**

**Duration of Unit:** 40 hours

### **Unit Description**

This unit covers the competencies required to demonstrate digital literacy. It involves operating computer devices, solving tasks using the Office suite, accessing online/offline data and information, performing online communication and collaboration, applying cybersecurity skills and performing jobs online. It also involves applying job entry techniques.

### **Summary of Learning Outcomes**

SNO	Learning Outcome	Duration (Hours)
1.	Operate computer devices	6
2.	Solve task using office suite	14
3.	Manage data and information	6
4.	Apply cyber security skills	4
5.	Online collaboration and communication	4
6.	Perform online jobs	4
7.	Apply job entry techniques	2
	<b>TOTAL</b>	<b>40</b>

### **Learning Outcomes, Content and Suggested Assessment Methods**

Learning Outcomes	Content	Suggested Assessment Methods
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<p>1. Operate computer devices</p>	<p>1.1 Computer devices</p> <ul style="list-style-type: none"> <li>1.1.1 Definition of terms           <ul style="list-style-type: none"> <li>1.1.1.1 Digital literacy</li> <li>1.1.1.2 Computer systems</li> <li>1.1.1.3 Information communication technology (ICT)</li> </ul> </li> <li>1.1.2 Importance of Information and Communication Technology</li> <li>1.1.3 Functions and uses of computers</li> <li>1.1.4 History of computers</li> <li>1.1.5 Classifications of computers</li> <li>1.1.6 Components of computer system</li> <li>1.1.7 Computer Hardware           <ul style="list-style-type: none"> <li>1.1.7.1 System unit</li> <li>1.1.7.2 Input devices</li> <li>1.1.7.3 Output devices</li> <li>1.1.7.4 Storage Devices</li> <li>1.1.7.5 Computer ports</li> </ul> </li> <li>1.1.8 Computer software           <ul style="list-style-type: none"> <li>1.1.8.1 Classifications of computer software.</li> <li>1.1.8.2 Operating system functions</li> </ul> </li> <li>1.1.9 Booting a computer</li> <li>1.1.10 Mouse use techniques</li> <li>1.1.11 Keyboard parts and uses techniques</li> <li>1.1.12 Desktop customization</li> <li>1.1.13 Files and folders management using operating system</li> <li>1.1.14 Computer internet connection           <ul style="list-style-type: none"> <li>1.1.14.1 Mobile networks/data plans</li> <li>1.1.14.2 Wireless hotspots</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Written assessment</li> <li>• Practical assessment</li> <li>• Interviews/ Oral questions</li> </ul>
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	<p>1.1.14.3 Cabled (Ethernet/fibre)</p> <p>1.1.14.4 Dial-Up</p> <p>1.1.14.5 Satellite</p> <p>1.1.15 Computer external devices</p> <p>1.1.15.1 Device connections</p> <p>1.1.15.2 Device controls (volume controls and Display properties)</p> <p>Practice</p> <p>1.2 Identify, assemble and connect the computer components listed in 1.1.7.</p> <p>1.2.1 Computer hardware</p> <p>1.2.1.1 System unit</p> <p>1.2.1.2 Input devices</p> <p>1.2.1.3 Output devices</p> <p>1.2.1.4 Storage devices</p> <p>1.2.2 Boot a computer according to booting standards/procedures</p> <p>1.2.3 Customise desktop</p> <p>1.2.4 Manage files and folders</p>	
2. Solve tasks using office suite	<p>2.1 Microsoft Office Suite</p> <p>2.1.1 Word processing concepts</p> <p>2.1.1.1 Examples of Word processing</p> <p>2.1.1.2 Importance of Word processing</p> <p>2.1.2 Working with word documents</p> <p>2.1.2.1 Opening and closing word processor Create a new document</p> <p>2.1.2.2 Save a document</p> <p>2.1.2.3 Switch between open documents</p> <p>2.1.3 Microsoft word screen layout</p> <p>2.1.3.1 Set basic options/preferences</p>	<p>Written assessment</p> <p>Practical assessment</p> <p>Oral assessment</p> <p>Project</p>

	<p>2.1.3.2 Help resources</p> <p>2.1.3.3 Use of magnification/zoom tools</p> <p>2.1.3.4 Display, hide built in tool bar</p> <p>2.1.3.5 Using navigation tools</p> <p>2.1.4 Creating word document</p> <p>2.1.4.1 Editing a document</p> <p>2.1.4.2 Formatting a document</p> <p>2.1.4.3 Formatting text</p> <p>2.1.4.4 Formatting paragraphs</p> <p>2.1.4.5 Formatting page/document</p> <p>2.1.5 Creating and editing tables</p> <p>2.1.5.1 Editing of tables</p> <p>2.1.6 Formatting tables</p> <p>2.1.6.1 Border and shadings</p> <p>2.1.6.2 Adjusting column width and row heights</p> <p>2.1.6.3 Changing text direction</p> <p>2.1.7 Inserting graphical objects</p> <p>2.1.7.1 Edit and format an object</p> <p>2.1.8 Mail merging</p> <p>2.1.9 Document print set up</p> <p>2.1.9.1 Print preview</p> <p>2.1.9.2 Page layout</p> <p>2.1.9.3 Paper size</p> <p>2.1.9.4 Orientation</p> <p>2.1.10 Printing a document</p> <p>2.2 Spreadsheets concepts</p> <p>2.2.1 Electronic spreadsheets</p> <p>2.2.2 Importance of electronic spreadsheets</p> <p>2.2.3 Components of spreadsheets</p>	
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	<p>2.2.4 Applications areas of spreadsheets</p> <p>2.2.5 Creating worksheets using Microsoft Excel</p> <ul style="list-style-type: none"> <li>2.2.5.1 Parts of Ms Excel Window</li> <li>2.2.5.2 Cell data types</li> <li>2.2.5.3 Cell referencing</li> <li>2.2.5.4 Block operations</li> <li>2.2.5.5 Arithmetic operators</li> </ul> <p>2.2.6 Data manipulation</p> <ul style="list-style-type: none"> <li>2.2.6.1 Basic functions and formulae</li> <li>2.2.6.2 Database functionalities           <ul style="list-style-type: none"> <li>2.2.6.2.1 Sorting data</li> <li>2.2.6.2.2 Filtering data</li> <li>2.2.6.2.3 Sub-totals</li> </ul> </li> </ul> <p>2.2.7 Editing a worksheet</p> <p>2.2.8 Formatting a worksheet</p> <p>2.2.9 Visual representation using charts</p> <p>2.2.10 Worksheet printing</p> <p>2.3 Electronic presentations</p> <ul style="list-style-type: none"> <li>2.3.1 Meaning and importance of electronic presentations</li> <li>2.3.2 Examples of an electronic presentations</li> <li>2.3.3 Application areas of electronic presentation.</li> <li>2.3.4 Creating presentations using Microsoft PowerPoint           <ul style="list-style-type: none"> <li>2.3.4.1 Parts of Ms PowerPoint Window</li> <li>2.3.4.2 Open and close presentation</li> <li>2.3.4.3 Creating slides</li> <li>2.3.4.4 Text management</li> <li>2.3.4.5 Use of magnification tools</li> <li>2.3.4.6 Switch between open presentations</li> </ul> </li> </ul>	
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	<p>2.3.5 Developing a presentation</p> <ul style="list-style-type: none"> <li>2.3.5.1 Presentation views</li> <li>2.3.5.2 Slides</li> <li>2.3.5.3 Master slide</li> </ul> <p>2.3.6 Text</p> <ul style="list-style-type: none"> <li>2.3.6.1 Editing text</li> <li>2.3.6.2 Formatting text</li> </ul> <p>2.3.7 Charts</p> <ul style="list-style-type: none"> <li>2.3.7.1 Using charts</li> <li>2.3.7.2 Organisational charts</li> </ul> <p>2.3.8 Graphical objects</p> <ul style="list-style-type: none"> <li>2.3.8.1 Insert, and manipulate object</li> <li>2.3.8.2 Insert tables</li> <li>2.3.8.3 Draw an object</li> </ul> <p>2.3.9 Outputs preparation</p> <ul style="list-style-type: none"> <li>2.3.9.1 Apply slides effects and transitions</li> <li>2.3.9.2 Check and deliver</li> <li>2.3.9.3 Spell check a presentation</li> <li>2.3.9.4 Slide orientation</li> <li>2.3.9.5 Slide shows navigation</li> </ul> <p>2.3.10 Print presentations (slides and handouts)</p> <p><b>Practice</b></p> <p>2.4 Create Word document,</p> <ul style="list-style-type: none"> <li>2.4.1 Insert header and footer</li> <li>2.4.2 Apply document editing techniques</li> <li>2.4.3 Apply formatting tools</li> <li>2.4.4 Format page</li> <li>2.4.5 Insert tables, graphical objects and charts.</li> <li>2.4.6 Save the changes to be printed out later.</li> </ul> <p>2.5 Create a workbook in Microsoft Excel</p>	
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	<p>2.5.1 Use basic formulae and functions to perform calculations</p> <p>2.5.2 Use editing tools such as deleting entries, insert row and columns, copying, moving, finding, replace and spell checking</p> <p>2.5.3 Format the worksheet</p> <p>2.5.4 Generate charts</p> <p>2.5.5 Save and print Workbook</p> <p>2.6 Create PowerPoint presentation slides</p> <p>2.6.1 Edit and format texts and paragraphs</p> <p>2.6.2 Insert objects, images, shapes and charts</p> <p>2.6.3 Apply predefined PowerPoint theme</p> <p>2.6.4 Add slide animations and transition effects</p> <p>2.6.5 Deliver presentations</p>	
3. Manage data and information	<p>3.1 Data and Information</p> <p>3.1.1 Definition of terms</p> <p>3.1.2 Importance and uses of data and information</p> <p>3.1.3 Computer networks</p> <p>3.1.3.1 Meaning and types of computer networks</p> <p>3.1.4 Meaning of internet</p> <p>3.1.4.1 Internet connectivity requirements</p> <p>3.1.4.2 Internet Service Providers</p> <p>3.1.5 Types of internet services</p> <p>3.1.5.1 Communication services</p> <p>3.1.5.2 Information services</p> <p>3.1.5.3 File transfer</p> <p>3.1.5.4 Worldwide webs services</p>	<p>Written assessment</p> <p>Oral assessment</p> <p>Practical assessment</p>

	<p>3.1.5.5 E –commerce</p> <p>3.1.5.6 Newsgroup</p> <p>3.1.6 Types Internet access applications</p> <p>3.1.6.1 Email Client</p> <p>3.1.6.2 Web browser</p> <p>3.1.6.3 Internet of things</p> <p>3.1.6.4 Internet Protocol</p> <p>3.1.7 Web browsing concepts</p> <p>3.1.7.1 Key concepts</p> <p>3.1.7.2 Security and safety</p> <p>3.1.8 Web browsing</p> <p>3.1.8.1 Using web browser</p> <p>3.1.8.2 Tools and settings</p> <p>3.1.8.3 Clearing cache and cookies</p> <p>3.1.8.4 Uniform Resource Locator</p> <p>3.1.8.5 Bookmarks</p> <p>3.1.8.6 Web outputs</p> <p>3.1.9 Web based search</p> <p>3.1.9.1 Search</p> <p>3.1.9.2 Critical evaluation of information</p> <p>3.1.9.3 Copyright, data protection</p> <p>3.1.10 Downloads Management</p> <p>3.1.11 Performing Digital Data</p> <p>3.1.12 Backup(Online and Offline)</p> <p>3.1.13 Emerging issues in internet</p> <p><b>Practice</b></p> <p>3.2 Establish an internet connection</p> <p>3.2.1 Open a web browser application allow/block cookie</p> <p>3.2.2 Add bookmarks/ favourites</p>	
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	<p>3.2.3 Download files to a location</p> <p>3.2.4 Copy URLs from a web page to another</p> <p>3.3 Use search engine to find information</p>	
4 Perform online communication and collaboration	<p>4.1 Communication and collaboration</p> <p>4.1.1 Netiquette principles</p> <p>4.1.2 Communication concepts</p> <p>4.1.1.1 Online communities</p> <p>4.1.1.2 Communication tools</p> <p>4.1.2 Email concepts</p> <p>4.1.2.1 importance of effective email</p> <p>4.1.2.2 email types and their purposes (personal, professional)</p> <p>4.1.3 Electronic Mail</p> <p>4.1.3.1 Sending E-mail</p> <p>4.1.3.2 Receiving E-mail</p> <p>4.1.3.3 Tools and settings</p> <p>4.1.3.4 Organizing E-mail</p> <p>4.1.4 Digital content copyright and licences</p> <p>4.1.5 Online collaboration tools</p> <p>4.1.5.1 Benefits and challenges of online collaboration tools</p> <p>4.1.5.2 Online storage and productivity</p> <p>4.1.5.2.1 Google Drive</p> <p>4.1.5.2.2 Dropbox</p> <p>4.1.5.2.3 iCloud Drive</p> <p>4.1.5.3 Online meetings</p> <p>4.1.5.4 Online learning environment</p> <p>4.1.5.5 Online calendars (google calendars)</p> <p>4.1.5.6 Social networks</p>	

	<p>(Facebook/Twitter/setting)</p> <p>4.1.6 Preparation for online collaboration</p> <p>    4.1.6.1 Common set up feature</p> <p>    4.1.6.2 set up</p> <p>4.1.7 Mobile collaboration</p> <p>    4.1.7.1 Key concepts</p> <p>    4.1.7.2 Mobile devices</p> <p>        4.1.7.2 Key types of Mobile Devices</p> <p>    4.1.7.3 Applications</p> <p>    4.1.7.4 Synchronization</p> <p>        4.1.7.4.1 key aspects of synchronization</p> <p><b>Practice</b></p> <p>4.1 Participate in online communities</p> <p>4.2 Download software to support online collaboration tools</p> <p>4.3 Upload, download, delete online files/folders</p> <p>4.4 Create and send an E-mail</p> <p>4.5 Set up an online meeting, share the agenda, and follow up afterward.</p> <p>4.6 Share files in an online meeting</p> <p>4.7 Install an application on a mobile device</p> <p>4.8 Synchronise mobile devices with mail, calendar, other devices</p>	
5. Apply cybersecurity skills	<p>5.1 Data protection and privacy</p> <p>    5.1.1 Introduction to cybersecurity</p> <p>    5.1.2 Data security core principles</p> <p>        5.1.2.1 Data confidentiality</p> <p>        5.1.2.2 data integrity</p>	<p>Written assessment</p> <p>Oral assessment</p> <p>Practical assessment</p>

	<p>5.1.2.3 data availability</p> <p>5.1.3 Internet security threats</p> <ul style="list-style-type: none"> <li>5.1.3.1 malware attacks</li> <li>5.1.3.2 phishing and social engineering</li> <li>5.1.3.3 distributed and denial of service</li> <li>5.1.3.4 password attacks</li> <li>5.1.3.5 Man-in –the –Middle attack (MitM)</li> <li>5.1.3.6 Cloud and Internet of Things attacks</li> </ul> <p>5.1.4 Computer threats and crimes</p> <ul style="list-style-type: none"> <li>5.1.4.1 Environmental threats to computers and information systems</li> <li>5.1.4.2 Physical threats to computer           <ul style="list-style-type: none"> <li>5.1.4.2.1 Theft of hardware</li> <li>5.1.4.2.2 Hardware failure</li> <li>5.1.4.2.3 Unauthorized access to physical components of a computer system</li> <li>5.1.4.2.4 Power surges and outages</li> </ul> </li> </ul> <p>5.1.5 Computer crimes</p> <ul style="list-style-type: none"> <li>5.1.5.1 Types of computer crimes</li> <li>5.1.5.2 Detection and protection against computer crimes</li> </ul> <p>5.1.6 Cybersecurity control measures</p> <ul style="list-style-type: none"> <li>5.1.6.1 Physical controls</li> <li>5.1.6.2 Technical/logical (passwords, pins, biometrics)</li> <li>5.1.6.3 Operational controls</li> </ul> <p>5.1.7 Policies and Laws governing protection of ICT in Kenya</p>	
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	<p>5.1.7.1 The computer Misuse and Cybercrimes Act No.5 of 2018</p> <p>5.1.7.2 The Data Protection Act No. 24 of 2019</p> <p><b>Practice</b></p> <p>5.2 Create password and biometrics to prevent unauthorised access</p> <p>5.3 Use Anti-virus</p> <p>5.4 Apply file security</p> <p>5.5 Backup data</p>	
6 Perform online jobs	<p>6.1 Online jobs</p> <p>6.1.1 Types of online jobs</p> <p>6.1.2 Online job platforms</p> <p>6.1.2.1 Remotask</p> <p>6.1.2.2 Cloud worker</p> <p>6.1.2.3 Data annotation tech</p> <p>6.1.2.4 Freelance</p> <p>6.1.2.5 Indeed</p> <p>6.1.2.6 Oneforma</p> <p>6.1.2.7 Appen</p> <p>6.1.3 Online account and profile management</p> <p>6.1.3.1 Types of online accounts and profiles</p> <p>6.1.3.2 Creating online accounts</p> <p>6.1.3.3 Managing profiles</p> <p>6.1.4 Online job bidding identification</p> <p>6.1.4.1 Benefits of online biding</p> <p>6.1.4.2 Examples of online bidding</p> <p>6.1.5 Online digital identity</p> <p>6.1.6 Executing online task</p> <p>6.1.6.1 Executing online task effectively</p>	<p>Written assessment</p> <p>Oral assessment</p> <p>Practical assessment</p> <p>Project</p>

	<p>6.1.7 Management of online payment accounts</p> <p>    6.1.7.1 Types of online payment accounts</p> <p>    6.1.7.2 Online payment process</p> <p>    6.1.7.3 Steps for effective management</p> <p>Practice</p> <p>6.2 Search online jobs platforms</p> <p>6.3 Create an online account</p> <p>    6.3.1 Setup profile</p> <p>    6.3.2 Identify online job bidding</p> <p>    6.3.3 Create new project</p>	
7 Apply job entry techniques	<p>7.1 Job Entry Techniques</p> <p>    7.1.1 Types of job opportunities</p> <p>        7.1.1.1 Self-employment</p> <p>        7.1.1.2 Salaried employment</p> <p>        7.1.1.3 Service provision</p> <p>        7.1.1.4 Product development</p> <p>    7.1.2 Sources of job opportunities (websites)</p> <p>    7.1.3 Functional writings</p> <p>        7.1.3.1 Resumes/CV building with word processing tools</p> <p>        7.1.3.2 Crafting effective Cover letters</p> <p>    7.1.4 Digital portfolios</p> <p>        7.1.4.1 Academic credentials</p> <p>        7.1.4.2 References and testimonials</p> <p>            7.1.4.2.1 letter of commendations</p> <p>        7.1.4.3 Certification participations</p> <p>        7.1.4.4 Awards and decorations</p> <p>    7.1.5 Interview skills</p> <p>        7.1.5.1 Introduction to interview</p> <p>            7.1.5.1.1 Virtual interviews</p>	<p>Written Assessment</p> <p>Practical assessment</p> <p>Oral assessment</p> <p>Portfolio of evidence</p>

	<p>7.1.5.1.2 Phone interviews</p> <p>7.1.5.1.3 Recorded video responses</p> <p>7.1.5.2 Preparing for virtual interview</p> <p>7.1.5.2.1 Setting up your space (quiet environment, background, lighting)</p> <p>7.1.5.2.2 Technical readiness (internet connection, camera, microphone)</p> <p>7.1.5.3 Professional presence on camera</p> <p>7.1.5.3.1 Body language (posture, eye contact)</p> <p>7.1.5.3.2 Clear and confident communication</p> <p>7.1.5.3.3 Grooming for a virtual environment</p> <p>7.1.5.4 Digital etiquette for virtual interviews</p> <p>7.1.5.4.1 Time management (logging in early and checking connections)</p> <p>7.1.5.4.2 Muting/unmuting appropriately</p> <p>7.1.5.4.3 Handling technical issues</p> <p>7.1.5.4.4 Using chat features for technical issues</p> <p>7.1.5.4.5 Closing the interview/meeting (thank the interviewer and log out promptly)</p> <p><b>Practice</b></p> <p>7.2 Create a resume and cover letters</p>	
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	7.3 Using a platform Google site build a portfolio that highlights projects, skills, and accomplishments	
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### Suggested Methods of Instruction

- Demonstration by the trainer
- Practical work by trainees
- Viewing of related videos
- Case study
- Role playing
- Project
- Group discussions
- Direct instruction

### Recommended Resources for 25 trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
<b>A</b>	<b>Learning Materials</b>			
1.	Technical books and eBooks		5 pcs	1:5
2.	Rolls flip charts		1pcs	1:25
3.	PowerPoint presentations	For trainer's use	1pcs	1:25
4.	Whiteboard		1pcs	1:25
5.	Online collaboration tools	Google workspace (google docs, sheets, slides)  Ms Teams or zoom	1 shared	Access for all students
6.	Anti-Virus		25 licenses	
7.	Web Browsers	Google chrome, Mozilla Firefox, or Microsoft Edge	Installed on computers	

8.	Microsoft office suite		25 licenses (1 licenses per computer)	
<b>B</b>	<b>Learning Facilities &amp; infrastructure</b>			
1.	Lecture/theory room		1	1:25
2.	Computer laboratory		1	1:25
<b>C</b>	<b>Consumable materials</b>			
1.	Printing papers		3	1:25
2.	Toner/cartridges		1	1:25
3.	Assorted whiteboard markers		1	
4.	Marker pen Ink		1	
<b>D</b>	<b>Tools and Equipment</b>			
1.	Assorted flash cards		1 pc	1:25
2.	Smartboard/Smart TV	Interactive smartboard	1 pc	1:25
3.	External storage media	64 GB USB Drive	5-10	1:25
		1 TB External HDD and SSD	2 pcs	1:13
4.	Printers	All-in-one printer (for printing, scanning and copying documents and assignments  WI-FI enabled)	1 pc	1:25
5.	Desktop/laptops/tablets/mobile phones	Installed with working operating system (Windows 10/11 Mac Os, Linux)  RAM: 4GB (8 GB recommended)  Processor: Intel core i3  Storage: 512gb or higher	15 pcs	1: 2

		Wi-Fi enabled Ports: USB, HDMI for peripherals, and video output		
6.	Projector	Resolution: 1080pb HD for clear visuals  Connectivity: HDMI, USB and wireless connectivity for laptop or desktop	1pcs	1:25
7.	Headphones/microphone/web cam		25pcs	1:25
8.	Networking devices(router/switch)	Wi-Fi router: dual band router (2.4 GHZ and 5GHZ) with good coverage to support multiple devices (25 computers)  High speed connection	1pcs	Shared