



**REPUBLIC OF KENYA**

**NATIONAL OCCUPATIONAL STANDARD**

**FOR**

**COMPUTER SCIENCE TECHNICIAN**

**KNQF LEVEL 6**

**(CYCLE 3)**

**PROGRAMME ISCED CODE: 0613 554 A.**



**TVET CDACC  
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NAIROBI**

## DESIGN GRAPHICS

ISCED UNIT CODE: 0613 554 04A

UNIT CODE: ICT/OS/CS/CR/11/6/MA

### UNIT DESCRIPTION

This unit covers the competencies required to understand Graphic Design. It involves applying fundamentals of graphic design, applying elements and principles of graphic design, applying typography techniques, creating and editing of images, performing layout design and printing the design.

### ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA <i>(Bold and italicised terms are elaborated in the Range)</i>
1. Apply fundamentals of graphic design	1.1 Graphics design fundamentals are applied 1.2 Graphic design equipment is selected based on the design. 1.3 Graphic design user requirements are analyzed 1.4 Applications areas of Graphic design is explored.
2. Apply elements and principles of graphic design	2.1 Elements of graphic design project are selected as per user requirements 2.2 Principles of graphic design project are applied as per user requirements 2.3 Elements of graphic design are applied
3. Apply typography techniques	3.1 Typography guidelines are applied 3.2 Applied measurements and standards of typography. 3.3 Typography technique for a graphic design is selected and applied project as per user requirements.
4. Create and edit images	4.1 software and tools for graphic design and photography are identified. 4.2 <b>Image file types</b> are identified 4.3 Letter forms, lines of type and body copy are created 4.4 Images are created and manipulated
5. Perform layout design	5.1 Applied proportion on layout design. 5.2 Unified systems are created of out dissimilar elements. 5.3 Dynamic layouts are created by using <b>typographic tools</b> 5.4 Created type and image project. 5.5 Multi-page layout planning was performed

ELEMENT	PERFORMANCE CRITERIA <i>(Bold and italicised terms are elaborated in the Range)</i>
6. Print design	<p>6.1 Tools and equipment for printing are selected</p> <p>6.2 <i>Types of printing</i> are selected and applied based on the design.</p> <p>6.3 Paper is classified according to types, size and weight.</p> <p>6.4 Chemicals used in printing are selected</p> <p>6.5 Printed actual design</p>

## RANGE

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

Variable	Range
1. Graphic design equipment may include but not limited to:	<ul style="list-style-type: none"> <li>● Computer</li> <li>● Scanner</li> <li>● Printer</li> <li>● Camera</li> <li>● Digital Tablet</li> </ul>
2. Image file types may include but not limited to:	<ul style="list-style-type: none"> <li>● Raster</li> <li>● Vector</li> </ul>
3. Typographical tools may include but not limited to:	<ul style="list-style-type: none"> <li>● Microsoft Publisher</li> <li>● Illustrator</li> <li>● Adobe InDesign</li> <li>● Adobe Photoshop</li> <li>● Paint.net</li> <li>● Corel Draw</li> </ul>
4. Types of printing may include but not limited to:	<ul style="list-style-type: none"> <li>● Digital</li> <li>● Flexography</li> <li>● Letterpress</li> <li>● Off set</li> <li>● Rotogravure</li> <li>● Screen</li> </ul>

## REQUIRED SKILLS AND KNOWLEDGE

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

### Required skills

The individual needs to demonstrate the following skills:

- Communications (verbal and written);
- Time management;
- Problem solving;
- Planning;
- Decision Making;
- Research;

### **Required knowledge**

The individual needs to demonstrate knowledge of:

- Fundamentals of graphic design
- Elements and principles of graphic design
- Typography techniques
- Creating and editing Images
- Layout Design
- Printing graphics

### **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> <ul style="list-style-type: none"><li>1.1 Determined graphic design user specifications</li><li>1.2 Selected and applied elements of graphic design project as per user requirements</li><li>1.3 Applied Measurements, standards and guidelines of typography.</li><li>1.4 Selected and applied typography technique for a graphic design project as per user requirements.</li><li>1.5 Identified image file types</li><li>1.6 Created letter forms, lines of type and body copy</li><li>1.7 Created and manipulated images based on software</li><li>1.8 Created unified systems of out dissimilar elements.</li><li>1.9 Selected and applied types of printing based on the design</li></ul>
2. Resource Implications	<p>The following resources should be provided:</p> <ul style="list-style-type: none"><li>2.1 Access to relevant workplace where assessment can take place</li><li>2.2 Appropriately simulated environment where assessment can take place</li><li>2.3 Resources relevant to proposed activity or task</li></ul>

3. Methods of Assessment	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1 Oral questioning</li> <li>3.2 Practical tests</li> <li>3.3 Observation</li> <li>3.4 Written tests</li> </ul>
4. Context of Assessment	<p>Competency may be assessed</p> <ul style="list-style-type: none"> <li>4.1 Off the job</li> <li>4.2 on the job</li> <li>4.3 During industrial attachment</li> </ul>
5. Guidance information for assessment	<p>5.1 Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>