



THE REPUBLIC OF KENYA

**COMPETENCY BASED CURRICULUM**

**FOR**

**CARPENTRY AND JOINERY**

**KNQF LEVEL 4**

**ISCED PROGRAM CODE: 0722 354B**



TVET CDACC

P.O BOX 15745-00100

NAIROBI

## TECHNICAL DRAWINGS

**UNIT CODE: CON/CU/CAJ/CC/02/4/B**

### **Relationship to Occupational Standards**

This unit addresses the unit of competency: Prepare and interpret technical drawings

**Duration of Unit: 40 hours**

### **Unit Description**

This unit covers the competencies required to prepare and interpret technical drawings. It involves competencies to select, use and maintain drawing equipment and materials. It also involves producing plain geometry drawings, solid geometry drawings, pictorial and orthographic drawings

### **Summary of Learning Outcomes**

1. Select, use and maintain drawing equipment and materials
2. Produce plane geometry drawings
3. Produce solid geometry drawings
4. Produce pictorial and orthographic drawings

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

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
1. Select, use and maintain drawing equipment and materials	<ul style="list-style-type: none"><li>• Identification and care of drawing equipment</li><li>• Identification and care of drawing materials</li><li>• Reference to manufacturer's instructions and work place procedures on use and maintenance of drawing equipment and materials</li><li>• Reference to relevant environmental legislations</li><li>• Use of Personal Protective Equipment (PPEs)</li></ul>	<ul style="list-style-type: none"><li>• Observation</li><li>• Oral questioning</li><li>• Written tests</li></ul>
2. Produce plane geometry drawings	<ul style="list-style-type: none"><li>• Types of lines in drawings</li><li>• Construction of geometric forms e.g. squares, circles</li><li>• Construction of different angles</li></ul>	<ul style="list-style-type: none"><li>• Oral questioning</li><li>• Practical tests</li><li>• Observation</li></ul>

	<ul style="list-style-type: none"> <li>• Measurement of different angles</li> <li>• Bisection of different angles and lines</li> <li>• Standard drawing conventions</li> </ul>	<ul style="list-style-type: none"> <li>• Written tests</li> </ul>
3. Produce solid geometry drawings	<ul style="list-style-type: none"> <li>• Interpretation of sketches and drawings of patterns e.g. cylinders, prisms and pyramids</li> <li>• Sectioning of solids e.g. prisms, cones</li> <li>• Development and interpretations of solids e.g. cylinder to cylinder and cylinder to triangular, prism</li> </ul>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Practical tests</li> <li>• Oral questioning</li> <li>• Written tests</li> </ul>
4. Produce orthographic drawings	<ul style="list-style-type: none"> <li>• Meaning of pictorial and orthographic drawings</li> <li>• Meaning of sectioning</li> <li>• Meaning of symbols and abbreviations</li> <li>• Drawing and interpretation of orthographic elevations</li> <li>• Dimensioning of orthographic elevations</li> <li>• Sectioning of views</li> <li>• Drawing objects in isometric view</li> <li>• Drawing objects in oblique view</li> <li>• Free hand sketching</li> </ul>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Practical tests</li> <li>• Oral questioning</li> <li>• Written tests</li> </ul>

### **Suggested Methods of Instruction**

- Demonstration by trainer
- Practice by the trainee
- Discussions

### **Recommended Resources**

- Drawing room
- Drawing instruments e.g. T-squares, set squares, drawing sets
- Drawing tables
- Pencils, papers, erasers
- Masking tapes