

ICT SYSTEM SUPPORT

UNIT CODE: IT/CU/ICT/CR/4/6

Relationship to Occupational Standards

This unit addresses the unit of competency: **PERFORM ICT INFRASTRUCTURE**

SUPPORT

Duration of Unit:150hours

Unit Description:

This unit describes the competencies required to perform ICT infrastructure support. It involves identification and documentation of ICT infrastructure, evaluation of the state of performance and possible causes of failure, diagnosing and fixing of the problems, testing of performance and user training.

Summary of Learning Outcomes:

By the end of the unit, the trainee should be able to:

1. Identify and Document ICT infrastructure
2. Evaluate the state of performance and possible causes of failures
3. Diagnose and fix problems
4. Test component performance
5. Perform User training

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Identify and Document ICT infrastructure	<ul style="list-style-type: none"><input type="checkbox"/> Definition of ICT infrastructure<input type="checkbox"/> Components of ICT Infrastructure<input type="checkbox"/> ICT Infrastructure specifications<input type="checkbox"/> Types of ICT infrastructure<ul style="list-style-type: none">✓ Computer hardware platforms✓ Operating system platforms✓ Enterprise and other	<ul style="list-style-type: none">• Practical exercises• Oral questioning• Learner portfolio of evidence

	<ul style="list-style-type: none"> software applications ✓ Data management and storage ✓ Networking and telecommunications platforms ✓ Internet platforms ✓ End users <input type="checkbox"/> Safety precautions of ICT Infrastructure <input type="checkbox"/> Documentation of Infrastructure assets and their operational and service status 	
2 Evaluate the state of performance and possible causes of failures	<ul style="list-style-type: none"> <input type="checkbox"/> Define troubleshooting <input type="checkbox"/> Possible causes of failure <ul style="list-style-type: none"> ✓ Unstable power ✓ Malfunctioning ✓ Mechanical faults <input type="checkbox"/> Environmental factors <ul style="list-style-type: none"> ✓ Natural disasters ✓ Dust ✓ Ventilation <input type="checkbox"/> User factors <ul style="list-style-type: none"> ✓ Malicious damage ✓ Accidents ✓ Lack of maintenance 	<ul style="list-style-type: none"> • Observation • Practical • Projects
3. Diagnose and fix problems	<ul style="list-style-type: none"> <input type="checkbox"/> Define Diagnostic terms <input type="checkbox"/> Identify diagnostic and repair tools and their functions <input type="checkbox"/> Tools to diagnose and fix the problems. <input type="checkbox"/> Hardware related problems <input type="checkbox"/> Software related problems <input type="checkbox"/> Internet/network related problems <input type="checkbox"/> User related problems <input type="checkbox"/> Role of ICT Policies in organizations 	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written tests • Learner portfolio of evidence.

4. Test component performance	<input type="checkbox"/> Test Hardware performance <input type="checkbox"/> Test Software performance <input type="checkbox"/> Test Internet/network performance <input type="checkbox"/> Performance analysis <input type="checkbox"/> Recommendation from performance analysis <input type="checkbox"/> Performance test report	<ul style="list-style-type: none"> • Practical exercises • Oral questioning
5. Perform User training	<input type="checkbox"/> Meaning of user training <input type="checkbox"/> Importance of user training <input type="checkbox"/> Implement end user training plan	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Learner portfolio of evidence. • Observation

Suggested Methods of Delivery

- Presentations and practical demonstrations by trainer;
- Guided learner activities and research to develop underpinning knowledge;
- Supervised activities and projects in a workshop;

The delivery may also be supplemented and enhanced by the following, if the opportunity allows:

- Visiting lecturer/trainer from the ICT sector;
- Industrial visits.

Recommended Resources

<p>Tools Comprehensive set of hand tools for the</p>
<p>Equipment</p> <ul style="list-style-type: none"> • Computers • Printers • Servers • Scanners • Network components
<p>Materials and supplies</p> <ul style="list-style-type: none"> • Digital instructional material including DVDs and CDs; • Trunking • Cable ties

- Power
- Network cabinets

Reference materials

Manufacturers manuals

easytvvet.com