

COMPUTER REPAIR AND MAINTENANCE

UNIT CODE: ICT/CU/ICTA/CC/03/4/A

Relationship to Occupational Standards

This unit addresses the unit of competency: **Perform Computer Repair and Maintenance**

Duration of Unit: 100hours

Unit Description:

This unit specifies competencies required to perform computer repair and Maintenance. It includes, assemble and disassembling faulty components, performing troubleshooting repair/replace and reassembling components, testing computer functionality and upgrading computer software/hardware.

Summary of Learning Outcomes:

1. Assemble and Disassemble Computer Components
2. Troubleshoot Computer Components
3. Repair/replace and reassemble components
4. Test computer/component functionality
5. Upgrade computer hardware

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Method
1. Disassemble faulty components	<ul style="list-style-type: none"><input type="checkbox"/> Tools for disassembling<input type="checkbox"/> Procedures and techniques for disassembling<input type="checkbox"/> Repair or replace and reassemble components	<ul style="list-style-type: none">• Practical exercises• Oral questioning• Written test• Learner portfolio of evidence.

2. Perform troubleshooting	<input type="checkbox"/> Identification of Computer parts <input type="checkbox"/> Assembling of computer maintenance tools <input type="checkbox"/> Theory of probable cause <input type="checkbox"/> Assembling and disassembling process <input type="checkbox"/> Test of theory of probable cause <input type="checkbox"/> Problem identification <input type="checkbox"/> Appropriate solutions	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
3. Repair/Replace and reassemble components	<input type="checkbox"/> Determine components to replace or repair <input type="checkbox"/> Procedures and Techniques for reassembling <input type="checkbox"/> Component testing <input type="checkbox"/> Repair/replace report	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
4. Test computer functionality	<input type="checkbox"/> Identify computer testing tools <input type="checkbox"/> Testing techniques are identified <input type="checkbox"/> Perform computer test functionality <input type="checkbox"/> status report	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
5. Upgrade computer software/hardware	<input type="checkbox"/> Determine Reasons of upgrading <input type="checkbox"/> Identify procedures and techniques for upgrading <input type="checkbox"/> Test functionality of the upgraded software/hardware	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence

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

Tools

- Straight-head screwdriver, large and small.
- Phillips-head screwdriver, large and small.
- Tweezers or part retriever.
- Needle-nosed pliers.
- Wire cutters.
- Chip extractor.
- Hex wrench set.
- Torx screwdriver

Equipment

- Computer
- Tool box

Materials and supplies

Digital instructional material including DVDs and CDs

Consumables for service and repair of computer including:

- Cleaning materials
- Hand cleaner
- Dusters

Reference materials

Manufacturers manuals