COMPUTER REPAIR AND MAINTENANCE

UNIT CODE: SEC/CU/CS/CR/01/6/A

Relationship to Occupational Standards
This unit addresses the unit of competency: Perform computer repair and maintenance

Duration of Unit: 120 hours

Unit Description
This unit covers the competencies required to perform computer repair and maintenance. It involves performing troubleshooting, dismantling faulty components, repairing/replacing faulty components, upgrading computer software/hardware, and preparing and documenting maintenance reports.

Summary of Learning Outcomes

1. Perform troubleshooting
2. Dismantle faulty components
3. Repair/Replace faulty components
4. Upgrade computer hardware/software
5. Prepare and document maintenance report

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods

1. Perform troubleshooting	• Meaning terms
	• Fundamentals of computer operations
	• Factors affecting computers performance
	   • Hardware
	   • Software
	• Computer testing
	• Tools used in computer testing
	   • Software
	   • Hardware
		• Written tests
		• Oral questioning
		• Observation
		• Practical tests

Learning Outcome	Content	Suggested Assessment Methods

2. Dismantle faulty components	• Meaning of terms
	• Computer dismantling tools
	• Computer components and dismantling procedures
	• Handling of computer components
	• Safety precautions
	  • Hardware
	  • Software
	  • Personnel
		• Written tests
		• Observation
		• Oral questioning
		• Practical tests

3. Repair/Replace faulty components	• Meaning of terms
	• Computer diagnostic procedures
	  • Tools and instruments used in computer diagnosis process
	• Procedures in repair/ replacements of computer components
	• Testing and replacements of repaired/replaced computer components
	• Procedures in computer repair
	  • Hardware
	  • Software
	• Assembling of computer components
		• Written tests
		• Observation
		• Oral questioning
		• Practical tests

4. Upgrade and update computer hardware/software	• Meaning of terms • Procedures in updating and upgrading computer software and hardware • Software and hardware licensing procedure • Testing of upgraded and updated computer hardware and software	• Written tests • Observation • Oral questioning • Practical tests
5. Prepare and document maintenance report	• Preparation of maintenance report • Sharing of maintenance report • Filing of maintenance report	• Observation • Oral questioning • Practical tests • Written tests

Suggested Methods of Instructions
- Demonstration by trainer
- Practice by the trainee
- Field trips

- On-job-training
- Discussions

Recommended Resources

Tools	Materials and supplies
• Measuring tools • Hardware and software diagnostic tools	• Stationery • Assorted Cables • Assorted protective devices • Accessories
Equipment	**Reference materials**
• Computer • Printers • Monitors • Projectors	• Standards • Internet • Organization ICT polices • Occupational Safety and Health Act (OSHA) • National Environmental Management Authority (NEMA) regulations • National Construction Authority (NCA) regulations • Tables