COMPUTER NETWORKING

UNIT CODE: SEC/CU/CS/CR/03/5/A

Relationship to Occupational Standards
This unit addresses the unit of competency: Perform computer networking

Duration of Unit: 130 hours

Unit Description

This unit covers the competencies required to perform computer networking. It involves identifying network types, configuring network devices, connecting network devices, monitoring network performance, documenting network report, training network users and maintaining of the network.

Summary of Learning Outcomes

1. Identify network type
2. Configure network devices
3. Connect network devices
4. Monitor Network performance
5. Perform Network security
6. Document network report
7. Train network users
8. Maintain Network

Learning Outcomes, Content and Suggested Assessment Methods:

Learning Outcome	Content	Suggested Assessment Methods
1. Identify network type	• Meaning of terms • Network components • Network design and architecture • Types of network topology	• Written tests • Oral questioning • Practical tests • Observation
2. Configure network devices	• Meaning of terms • Network configuration • Types of network protocols • Network segmentation • Network privileges • Network connections	• Written tests • Oral questioning • Practical tests • Observation
3. Connect network devices	• Meaning of Terms • Tools used in network devices • Importance of termination • Stability and connectivity of the network • Cable Management	• Written tests • Oral questioning • Practical tests • Observation

4. Monitor Network performance	• Meaning of teams • Monitoring tools in network performance • Deployment of network monitoring tools • Monitoring network status • Network operation manual	• Written tests • Oral questioning • Practical tests • Observation

5. Perform Network security	• Meaning of terms
	• Organization cyber security policy
	• Vulnerability assessment
	• Tools in network security e.g
	  • Antivirus
	  • Firewalls
		• Written tests
		• Oral questioning
		• Practical tests
		• Observation

6. Document network report	• Meaning of terms • Preparation of networking report • Report sharing • Report filing	• Written tests • Oral questioning • Practical tests • Observation
7. Train network users	• Meaning of terms • Identification and training of network users. • Preparation of network training manuals	• Written tests • Oral questioning • Practical tests • Observation
8. Maintain Network	• Meaning of terms • Network optimization • Network vulnerability and security • Preparation of network maintenance schedule and updates	• Written tests • Oral questioning • Practical tests • Observation

Suggested Methods of Instructions
- Projects
- Demonstration by trainer
- Practice by the trainee
- Field trips
- On-job training
- Discussions

Recommended Resources

Tools and equipment	Materials and supplies
- Cable Strippers - Pliers - Screw drivers - Chisels - Crimping tools - Personal protective equipment - Computers	- Stationery - Cables - Accessories - Cable trays - Cable ducts - Trunkings - Screws
Reference materials - Occupational safety and health act (OSHA) - Work injury benefits act(WIBA) - Manufacturers' catalogues - British standards - KEBS standards - Tables	

SOFTWARE APPLICATION SECURITY

UNIT CODE: SEC/CU/CU/CR/06/5/A

Relationship to Occupational Standards
This unit addresses the unit of competency: Secure software application

Duration of Unit: 110 hours