

PERFORM COMPUTER SYSTEM ADMINISTRATION

UNIT CODE: 0612 551 12A

UNIT DESCRIPTION

This unit covers the competencies required to perform computer system administration. It involves the following: Manage Computer Systems, Configure Computer hardware and software and Upgrade Computer systems

Elements	Performance Criteria
These describe the key outcomes which make up workplace functions	These are assessable statements which specify the required level of performance for each of the elements <i>(Bold and italicized terms are elaborated in the range)</i>
1.Manage Computer Systems	1.1 Incident response is conducted as per work procedure 1.3 System User management is conducted as per the work procedure 1.4 Computer System Resource allocation are allocated as per work procedures 1.5 Disaster recovery planning is conducted as per organizational procedures 1.6 Policy enforcement is adopted as per work requirement
2. Configure Computer hardware and software	2.1 Systems compatibility and requirements are identified as per user manual 2.2 Tools and workspace is prepared as per work procedure. 2.3 Computer software installation and configuration is performed as per user manual. 2.4 System functionality is tested as per work procedure. 2.5 Data migration is performed as per the work procedure. 2.6 Systems Backup is set up as per work policy
3. Upgrade Computer systems	3.1 Computer systems to upgrade and update are identified as per work procedure 3.2 Computer systems for update and upgrade are categorized as per work procedure 3.3 Computer systems updates and upgrade are performed as per organizational procedure 3.4 Upgrades and updates are documented as per work requirement

RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

1. Computer System Resource may include but not limited to:	• Hardware: Desktop or laptop computer, standard peripherals (keyboard, mouse, monitor), internet connectivity. • Software: • Operating System (e.g., Windows, macOS, Linux) • Office Productivity Suites (e.g., Microsoft 365, Google Workspace, LibreOffice) • Web Browsers • Email Clients • Basic Communication/Collaboration Tools (e.g., Zoom, Microsoft Teams, Slack) • Network: • Storage: Personal network drive (e.g., home drive), cloud storage (e.g., OneDrive, Google Drive).
2. Tools may include but not limited to:	• Operating System Built-in ToolsDevice Manager/System Information: Basic Command-Line Interface (CLI) Commands:BIOS/UEFI Setup UtilityAdvanced Operating System Tools: • Network Configuration Tools: (e.g., netstat, traceroute). • Remote Desktop/Assistance Tools: • Scripting Basics • Imaging and Deployment Tools • Advanced Command-Line Interface (CLI) and Shell Scripting • Configuration Management Tools • Network Management Tools: • Virtualization Management Tools • Cloud Management Consoles and CLIs • Infrastructure as Code (IaC) Tools

REQUIRED KNOWLEDGE AND SKILLS

This section describes the knowledge and skills required for this unit of competency.:

Required knowledge

- Computer Operations
- Setup Computer Network
- Network testing procedures
- Safety awareness
- Environmental conservation

- Workplace safety and health
- Basics electronics

Required skills

- Critical thinking
- Communication skills
- Problem-solving skills
- Creativity and innovation
- Computer Network setup
- Network configuration techniques
- Network Monitoring
- Technical proficiency
- Scripting and automation
- Operating systems proficiency
- Server Administration
- Basic programming

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills range.

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Manage Computer Systems 1.2 Configure Computer hardware and software 1.3 Upgrade Computer systems
2. Resource implications	The following resources should be provided: 2.1 Appropriately simulated environment where assessment can take place 2.2 Access to relevant work environment 2.3 Resources relevant to the proposed activities or tasks; including computers, media, routers, switches, ports etc.
3. Methods of assessment	Competency in this unit may be assessed through: 3.1 Observation 3.2 Oral questioning 3.3 Portfolio of evidence 3.4 Interviews 3.5 Third party report 3.6 Practical assessment 3.7 Written tests

4. Context of assessment	4.1 This Competency may be assessed in a workplace or a simulated workplace.
5. Guidance information for assessment	5.1 Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.