

Skills for Employment Investment Project (SEIP)

Standards/ Curriculum Format

For

Server Administration & Cloud Management

Course Duration: Two Months

Course Structure and Requirements

Course Title: Server Administration & Cloud Management

Course Objectives:

- a) This course is specially designed to provide technical knowledge and skills to cope with the requirement of System Administration and/or Server Administration occupations of the IT sector. The course will be implemented to ensure at least 67% of total contact hours on practical/hands on skills training or practice and 33% trade/occupations related theory including OHS and soft modules;
- b) The course is designed to enable trainees to acquire a range of technical and vocational, practical, personal and organizational skills valued and utilized both within and beyond the workplace;
- c) The course is designed to meet the required competencies of the occupations needed in the IT labor market in and outside the country;

Course Outline

Name of the Course	Duration of Course	Entry Qualification
Server Administration & Cloud Management	1. Three days per week 2. 4:00 Hours per day	1. Age minimum = 22+ yrs 2. Education = Graduation from Computer Science or any equivalent subject

Module 1: Operating System

SI N o	Unit Code	Unit of Competency (UoC)Title
Generic- Compulsory		
1	SACM-M1-GC-01	Learn Operating System Fundamentals.
Occupation Specific Knowledge(trade theory) –Compulsory		
2	SACM-M1-SK-01	Learn Operational Procedures.
Occupation Specific Skills(practical/demonstration)- Compulsory		
3	SACM-M1-SS-01	Understand network fundamentals to create a SOHO network.

Module 2: Security Fundamentals

SI N o	Unit Code	Unit of Competency (UoC)Title
Occupation Specific Knowledge(trade theory) –Compulsory		
1	SACM-M2-GC-01	Learn about Security fundamentals
Occupation Specific Skills(practical/demonstration)- Compulsory		
2	SACM-M1-SK-01	Learn Security Protection Fundamentals

Module 3: Data Communications and Networking

SI N o	Unit Code	Unit of Competency (UoC) Title
Generic- Compulsory		
1	SACM-M3-GC-01	Defining Networks with the OSI Model.
Occupation Specific Knowledge(trade theory) –Compulsory		
2	SACM-M3-SK-01	TCP/IP.
3	SACM-M3-SK-02	Understanding Internet Protocol.
4	SACM-M3-SK-03	Working with Networking Services.
Occupation Specific Skills(practical/demonstration)- Compulsory		
5	SACM-M3-SS-01	Understanding Wide Area Networks.
6	SACM-M3-SS-02	Defining Network Infrastructures and Network Security.
7	SACM-M3-SS-03	Sub netting.

Module 4: VMware Workstation

SI N o	Unit Code	Unit of Competency (UoC) Title
Occupation Specific Knowledge(trade theory) –Compulsory		
1	SACM-M4-SK-01	Understand VMware network
Occupation Specific Skills(practical/demonstration)- Compulsory		
1	SACM-M4-SS-01	VMware network and service configuration

Module 5: Windows Server 2012

Sl N o	Unit Code	Unit of Competency (UoC) Title
Generic- Compulsory		
1	SACM-M5-GC-01	Introduction to Windows Server 2012
Occupation Specific Knowledge(trade theory) –Compulsory		
1	SACM-M5-SK-01	Deploying and Managing Windows Server 2012.
Occupation Specific Skills(practical/demonstration)- Compulsory		
1	SACM-M5-SS-01	Introduction to Active Directory Domain Services.
2	SACM-M5-SS-02	Working with GPO.
3	SACM-M5-SS-03	Active Directory Users & Groups.
4	SACM-M5-SS-04	Implementing File and Print Service.
5	SACM-M5-SS-05	Popular Windows Network Services and Applications.
6	SACM-M5-SS-06	Implementing DHCP.
7	SACM-M5-SS-07	Implementing DNS.
8	SACM-M5-SS-08	Implementing Web Server IIS.

Module 6: Linux Administering

SI N o	Unit Code	Unit of Competency (UoC)Title
Generic- Compulsory		
1	SACM-M6- GC-01	Introduction to Linux
Occupation Specific Knowledge(trade theory) –Compulsory		
1	SACM-M6-SK- 01	Installing Linux.
2	SACM-M6-SK- 02	Familiarizing Yourself with Linux.
Occupation Specific Skills(practical/demonstration)- Compulsory		
1	SACM-M6-SS- 01	Managing User and Group Accounts.
2	SACM-M6-SS- 02	Managing Partitions and the Linux File system.
3	SACM-M6-SS- 03	Managing Files in Linux.
4	SACM-M6-SS- 04	Working with Linux Permissions and Ownership.
5	SACM-M6-SS- 05	Managing Packages.
6	SACM-M6-SS- 06	Configuring Network Services.
7	SACM-M6-SS- 07	Implementing DNS Server.
8	SACM-M6-SS- 08	DHCP Server.

9	SACM-M6-SS-09	FTP, SAMBA Server.
10	SACM-M6-SS-10	Proxy Server.
11	SACM-M6-SS-11	Implementing Mail Server.
12	SACM-M6-SS-12	Implementing Web Server.

Module 7: Implementing a High-Availability Environment

SI N o	Unit Code	Unit of Competency (UoC)Title
Generic- Compulsory		
1	SACM-M7-GC-01	Windows in the cloud.
Occupation Specific Knowledge(trade theory) –Compulsory		
1	SACM-M7-SK-01	Preparing Windows features for the cloud.
2	SACM-M7-SK-02	Producing a disaster recovery plan.
Occupation Specific Skills(practical/demonstration)- Compulsory		
1	SACM-M7-SS-01	Scheduling Windows backups

Module 8: Cloud Management

Sl No	Unit Code	Unit of Competency (UoC) Title
Generic- Compulsory		
1	SACM-M8-GC-01	Cloud Provisioning and Administration.
Occupation Specific Knowledge(trade theory) –Compulsory		
1	SACM-M8-SK-01	Cloud Bursting & Cloud Interoperability.
2	SACM-M8-SK-02	Strategic policy design for cloud usage and compliance.
3	SACM-M8-SK-03	Disaster Recovery and Business Continuity strategies for Cloud.
4	SACM-M8-SK-04	Performance Measures, Monitoring and Optimization in Production.
5	SACM-M8-SK-05	Cloud Security Fundamentals.
6	SACM-M8-SK-06	Federated controls and strategies for multiple cloud and non-cloud administration.
7	SACM-M8-SK-07	IaaS: Cloud Infrastructure Benchmarking.
8	SACM-M8-SK-08	IaaS: Workload Definition.
9	SACM-M8-SK-09	PaaS Application Container Management Issues.
10	SACM-M8-SK-10	PaaS Cloud Broker Platforms.
11	SACM-M8-SK-11	SaaS: Cloud service catalogues and application marketplaces
12	SACM-M8-SK-12	SaaS: Multi-Tenant Data Management
Occupation Specific Skills(practical/demonstration)- Compulsory		
1	SACM-M8-SS-01	IaaS: Deployment of Virtual Clouds, Virtual DCs and Virtual Networks.
2	SACM-M8-SS-02	IaaS: Virtual Storage Provisioning and Management.
3	SACM-M8-SS-03	IaaS: Deployment Automation and Elastic Sizing of Environments.
4	SACM-M8-SS-04	IaaS: VM Deployment and Maintenance Life Cycle.

5	SACM-M8-SS-05	PaaS Deployment, Administration and Security of Cloud-Enabled Platforms.
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