# **DIPLOMA IN NETWORK AND** SYSTEM ADMINISTRATION

### **Program Description**

The aim of the Diploma in Network and System Administration is to equip students with the knowledge, practical skills, and ethical understanding required to excel in the field of network and system administration of Information Technology infrastructure. It offers a comprehensive curriculum that covers the fundamental concepts, principles, and theories enabling graduates to be proficient in installing, configuring, and maintaining network and computer system hardware and software. It equips students with the expertise to troubleshoot and resolve network and system problems, implement robust security measures, and communicate effectively with both technical and nontechnical audiences. Furthermore, this program instils a commitment to professional and ethical behaviour while fostering lifelong learning skills to ensure graduates remain current in a rapidly evolving field. Upon completion of the program, graduates will be well-prepared for a successful career in network and computer system administration and will be able to adapt to emerging technologies in the industry.

### **Program Learning Outcomes**

- 1. Demonstrate a comprehensive understanding of the fundamental concepts, principles, and theories of network and system administration.
- 2. Implement networks and systems hardware and software.
- 3. Assess networks and systems performance by troubleshooting and resolving typical problems
- 4. Secure networks and systems hardware and software.
- 5. Communicate effectively with technical and non-technical audiences.
- 6. Demonstrate professional and ethical behaviour.

## **Occupation and Industry Sector**

# Requirements

#### **Completion Requirements**

Students seeking the Level 5 Diploma in Network and System Administration qualification must successfully complete all mandatory core courses worth 90 credit

Code	Title	Credit Hours
Network and S	System Administration Mandatory Core Courses	
Required Credits:	90	
GED 100	Develop English language skills	3
GED 200	Document Network Issues - Technical English	4
NSA 106	Create simple software programs and develop problem solving skills	4
NSA 103	Comply with copyrights, ethics, privacy and standards in an ICT environment	2
NSA 104	Administer network server	4
NSA 204	Manage Linux servers	4
NSA 101	Install, configure and test a small local area network	4
NSA 205	Administer wireless networks	4
NSA 108	Manage network routing and switching	4

NSA 203	Manage network security	4
NSA 201	Configure enterprise virtual computing environments	4
NSA 207	Manage VLANs and WANs	4
NSA 202	Develop fundamental concepts of cloud services and infrastructure	4
NSA 110	Classify Computer Hardware, Network Devices and Protocols	4
NSA 111	Administer Network Services	4
NSA 210	Provide Client Support in an Information and Communications Technology (ICT) Environment	3
NSA 211	Administer Domain Services	4
NSA 212	Process Threat Data	4
NSA 213	Investigate Emerging Networking Challenges	4
NSA 130	Experience the Nature of the Workplace	4
NSA 230	Undertake on-job experience	4
NSA 231	Undertake On Job Training and Support	4
NSA 232	Practice Networks Administration	3
NSA 233	Practice Systems Administration	3

Description	Data
Total Required Credits	90
Program Code	DCNSA
Major Code	NSA

# **Ideal Study Plan**

### **Recommended Sequence of Study**

Level 5 Diploma in Network and System Administration

Year 1		
Semester 1		Credit
		Hours
GED 100	Develop English language skills	3
NSA 106	Create simple software programs and develop problem solving skills	4
NSA 103	Comply with copyrights, ethics, privacy and standards in an ICT environment	2
NSA 110	Classify Computer Hardware, Network Devices and Protocols	4
NSA 104	Administer network server	4
	Credit Hours	17
Semester 2		
GED 200	Document Network Issues - Technical English	4
NSA 101	Install, configure and test a small local area network	4
NSA 111	Administer Network Services	4
NSA 204	Manage Linux servers	4
NSA 205	Administer wireless networks	4
NSA 130	Experience the Nature of the Workplace	4
	Credit Hours	24
Year 2		
Semester 3		
NSA 108	Manage network routing and switching	4
NSA 201	Configure enterprise virtual computing environments	4
NSA 203	Manage network security	4
NSA 210	Provide Client Support in an Information and Communications Technology (ICT) Environment	3
NSA 211	Administer Domain Services	4
NSA 230	Undertake on-job experience	4

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NSA 232	Practice Networks Administration	3
	Credit Hours	26
Semester 4		
NSA 202	Develop fundamental concepts of cloud services and infrastructure	4
NSA 207	Manage VLANs and WANs	4
NSA 212	Process Threat Data	4
NSA 213	Investigate Emerging Networking Challenges	4
NSA 233	Practice Systems Administration	3
NSA 231	Undertake On Job Training and Support	4
	Credit Hours	23
	Total Credit Hours	90