# NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY

#### PRESCRIPTION: NM630 NETWORK INFRASTRUCTURE

AIM OF MODULE: To provide students with the knowledge and

skills required to implement and administer a

network infrastructure.

CREDITS: 7

STUDENT LEARNING HOURS: 70

CONTENT REVISED: 2004 (new)

PRESCRIPTION EXPIRY DATE: Nov 2011 (not currently offered by an ITP)

### **Level and Assessment Schedule**

		Highest Skill Level			ill –	Suggested Assessment Percentage
	TOPICS	R	С	Α	Р	
1.	Administer routing and remote access.			*		30
2.	Secure and monitor network traffic and access.			*		30
3.	Configure DHCP, DNS and WINS			*		40
						100

#### **LEARNING OUTCOMES**

The student will:

- A 1. Install, configure and administer a router and a remote access server.
- A 2. Secure and monitor network traffic
- A 3. Configure three network services (DHCP, DNS and WINS).

#### CONTENT

# 1. Administering routing and remote access

- Administer a router and configure packet filters.
- Configure remote access for users, including the use of a RADIUS server.
- Create, configure and apply policies for users.
- Dial-up and VPN access.

# 2. Securing and monitoring network traffic and access

- Implement IPSec.
- Implement certificates.
- Collect and analyse network traffic data and server performance data.

#### 3. Configuring DHCP, DNS and WINS includes:

- Implement and troubleshoot a DHCP server and DHCP Relay agent
- Implement and troubleshoot DNS servers
- Implement and troubleshoot WINS servers

## **NOTES TO TUTORS**

Any appropriate server operating system can be used.