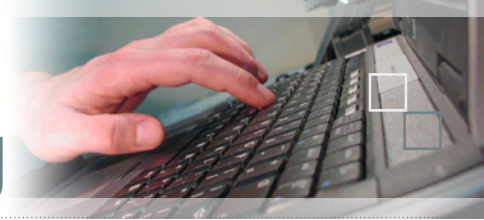


# Diploma in Network Engineering



## Qualification Description

The Diploma in Network Engineering is approximately 12 months full time\* or 38 months part time\*. This qualification offers training towards a number of the industry's most highly sought, globally recognised vendor certifications: Network+, Project+, CCNA, MCTS: Configuring Windows 7 and your choice of MCITP: Server Administrator or Linux+ and RHCSA.

## What will I learn?

The qualification provides training in a range of skill sets. This includes the design, installation and management of computer networks and systems, network security, trouble shooting, project management, programming concepts and virtualisation technologies.

## Should I consider this qualification?

This is an advanced qualification for those seeking career advancement in the field of networking design and management. It should appeal to those who wish to obtain multiple vendor certifications while achieving a widely recognised IT qualification.

## What do I need to start?

To gain entry to the qualification, applicants are expected to have successfully achieved:

- A satisfactory result in Computer Power's Aptitude test
- Completed an IT Certificate at NZQA Level 4 or higher (or equivalent)

For International students an additional English language requirement as follows must also be met:

- IELTS 5.5 or equivalent

## Major Qualification Goals

Upon completion of this qualification, students will be able to:

- Complete computing tasks and functions in a number of operating system environments
- Configure and administer a local area network
- Troubleshoot and resolve network problems and manage network security
- Demonstrate communication, problem solving, time management, planning and goal setting skills.
- Configure, install and troubleshoot Windows 7
- Understand and configure virtual machines
- Understand and configure Microsoft Exchange Server

## Career Paths

This qualification can complement your existing skills and qualifications or provide further opportunities in your current role. It can also prepare you for a number of career opportunities including:

### CAREER ENTRY

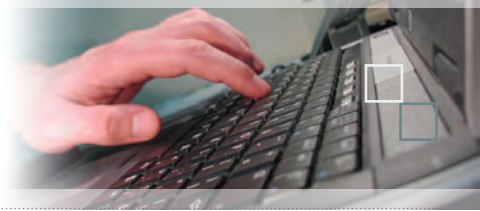
Network Engineer  
 Network Administration  
 Technician  
 Service Administration  
 Systems Support  
 Service  
 PC Support  
 Hardware Support  
 Software Support  
 Help Desk

### FUTURE OPPORTUNITIES

Network Manager  
 Network Administrator  
 Service Manager  
 Technical Manager  
 Help Desk Manager  
 Customer Engineer  
 Workshop Manager  
 Self Employed  
 Sales

\*Based on: Full-time study load of 5 shifts per week of approximately 5 hours per shift. Part-time study load of 2 shifts per week of approximately 4 hours per shift. Study schedules can also be tailored to meet your needs.

# Diploma in Network Engineering



## INTRODUCTION

- Introduction to Computer Power
- Introduction to Linux

## NETWORK+

- Network concepts
- Network installation and configurations
- Network applications and administration
- Network structure and security

## PROJECT+

- Project processes, scope and life cycle
- Project time and cost management
- Managing quality, resources, communications and risk
- Project procurement

## OPERATE A DATABASE APPLICATION

- Creating a database
- Organising the database
- Entering and retrieving data
- Reports and queries

## INTRODUCTION TO EXCHANGE SERVER

- Exchange server fundamentals
- Administering exchange server

## INTRODUCTION TO VIRTUALISATION

- Understand the concepts and types of virtualisation
- Describe the main virtualisation products and tools
- Install and configure Microsoft virtualisation software
- Create a virtualised operating system

## MCTS: CONFIGURING WINDOWS 7

- Install, upgrade, deploy and migrate to Windows 7
- Configure network connectivity
- Configure access to resources and mobile computing
- Configure backup and recovery options

## STRUCTURED QUERY LANGUAGE

- Understand the fundamentals of the SQL Language
- Construct simple SQL statements

## PROGRAM DESIGN CONCEPTS

- Principles of programming techniques
- Apply three basic control structures of sequence, selection and repetition in writing an algorithm
- Check algorithms using test data

## CISCO NETWORK ASSOCIATE

- CCNA Certification Process
- Internet working
- The OSI Model
- Managing Cisco Devices
- Cisco Catalyst Switches
- CCNA Exam Preparation

## GROUP DEVELOPMENT PROJECT

- IT business strategy development
- Manage, guide and apply project integration and quality management techniques
- Project life cycle design

## PROFESSIONAL DEVELOPMENT PROGRAM

- Goal setting and planning
- Time and personal resource management
- Communication skills, decision making
- Telephone and written communication skills

## EMPLOYMENT PREPARATION AND PLANNING

- Surveying the job market
- Matching skills with employer needs
- Interview techniques

## FIELD SITE PRACTICAL TRAINING

- Trainees work at an independent IT company where they are involved in day-to-day operations. A manager from the company returns an assessment of the trainee's performance.

## ELECTIVES

Students will choose to major in one of the following electives:

### LINUX+

- Managing Linux hardware and software
- Command line tools
- Administering the system and managing files
- Configuring printers and basic networking

### AND

### RED HAT CERTIFIED SYSTEM ADMINISTRATOR

- Hardware, device configuration and installation
- Linux file system management
- Network configuration and troubleshooting
- System initialisation, services and administration tools.

### OR

### MCITP: SERVER ADMINISTRATOR

- Configuring Windows Server 2008 Active Directory
- Configuring Windows Server 2008 Network Infrastructure
- Windows Server 2008 Server Administration