

# Diploma of Information Technology (Advanced Network Engineering)



## Course Description

The Diploma of Information Technology (Advanced Network Engineering) is approximately 13 months full time\*.

This course offers training in six of the industry's most highly sought, globally recognised vendor certifications: Network+, CCNA, MCSA, Red Hat certification stream, Security+ and CWNP CWTS.

## Course Duration

Estimated course completion time is 54 weeks. Depending on individual commitment and capability, the diploma completion time may vary between a minimum of 49 weeks to a maximum of 58 weeks. Through normal progress, student's are expected to complete the course in 54 weeks.

## What will I learn?

The course provides training in a range of skill sets. This includes the design, installation and management of computer networks and systems network security, troubleshooting, planning, implementation and maintenance of various security systems including Wi-Fi, Bluetooth, Infrared and VoWLAN.

## Should I consider this course?

This is an advanced course for those seeking career advancement in the field of networking design, management and security. 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 course, applicants are expected to have successfully achieved:

- Computing Diploma Level 5 or
- Non computing Degree
- IELTS 6.0 or equivalent
- Computer Power's Aptitude test

## Major Course Goals

Upon completion of this course, 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
- Communication security, infrastructure security, cryptography, access control, authentication, hacking and operational security

## Career Paths

This course can complement your existing skills and qualifications or provide further opportunities in your current role.

### CAREER ENTRY

Network Engineer  
 Network Security Technician  
 Technician  
 Service Administration  
 System Support  
 Second Level hardware Support  
 Second Level Helpdesk  
 Self Employed  
 Sales

### FUTURE OPPORTUNITIES

Network Manager  
 Network Security Manager/  
 Professional  
 Service Manager  
 IT Manager

\*Based on: Full-time study load of 5 shifts per week of 5 hours per shift.

# Diploma of Information Technology

## (Advanced Network Engineering)



### INTRODUCTION

- Orientation
- Introduction to Computer Power

### NETWORK OPERATION SYSTEMS

- Planning the Local Area Network
- Installing the Local Area Network
- Network structure and security
- Managing users and groups
- Setting up and configuring a network workstation
- Setting up a server and network

### NETWORK+

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

### MICROSOFT CERTIFICATIONS (MCP & MCSA)

- Implementing Microsoft Windows Server 2003 Network Infrastructure
- Managing and Maintaining a Microsoft Windows Server 2003 Environment
- Implementing and Supporting Microsoft Windows XP Professional

### LINUX RED HAT CERTIFICATION (RHCT)

- Hardware, device configuration and installation
- Linux File system Management
- System initialisation, services and administration tools
- Network configuration and troubleshooting
- Red Hat Linux Computing Essentials
- Red Hat Linux Core System Administration

### CERTIFIED CISCO NETWORK ASSOCIATE

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

### SECURITY+

- General security concepts
- Communication Security
- Infrastructure Security
- Basics of Cryptography
- Operational and Organisational Security

### CERTIFIED WIRELESS TECHNOLOGY SPECIALIST (CWTS)

- Wi-Fi Technology, Standards and Certifications
- Hardware and Software
- Radio Frequency (RF) Fundamentals
- Site Surveying and Installation
- Applications, Support and Troubleshooting
- Security and Compliance

### 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