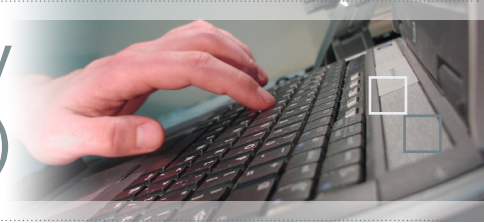


Diploma of Information Technology (Network Engineering)



Course Description

The Diploma of Information Technology (Network Engineering) is approximately 12 months full time* or 38 months part time*. This course offers training towards six of the industry's most highly sought, globally recognised vendor certifications: A+, Network+, Project+, CCNA and you choice of Microsoft (MCP and MCSA) or Linux Red Hat (RHCT).

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, trouble shooting, project management, programming concepts and various programming languages.

Should I consider this course?

This is an advanced course 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 qualifications.

What do I need to start?

To ascertain whether you qualify for a course at Computer Power Institute, you must obtain a satisfactory result on our entrance assessment. Additionally, you will have successfully completed Year 12/UE or Bursary or have work experience behind you. Of course, you need enthusiasm and a willingness to learn. Knowledge of Microsoft word processing and spreadsheet applications is desirable.

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
- Analyse client requirements and design, develop, code and evaluate the appropriate business solution using a variety of programming languages
- Demonstrate communication, problem solving, time management, planning and goal setting skills.

Career Paths

This course 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

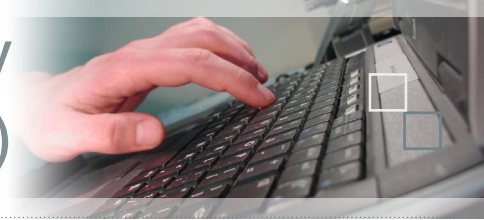
Network Engineer
 Network Administration
 Technician
 Service Administration
 Systems Support
 Service
 PC Support
 Hardware Support
 Software Support
 Help Desk

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 of Information Technology (Network Engineering)



INTRODUCTION

- Orientation
- Introduction to Computer Power

HELP DESK PROBLEM SOLVING TECHNIQUES

- Help desk roles, responsibilities and procedures
- Providing advice
- Questioning and listening
- Documentation

EXTENDED CUSTOMER SERVICE

- The customer/business relationship
- Dealing with difficult customers
- Customer feedback

A+ ESSENTIALS AND PRACTICAL APPLICATION

- Install and configure PC hardware and system components
- Disk, peripheral and device management
- System upgrades and maintenance
- Troubleshooting

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

INFORMATION SYSTEMS ANALYSIS

- Detailed investigation and project analysis
- System design and development
- System life cycle methodologies
- System development tools

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

PROGRAMMING CONCEPTS 1

- Create simple Java programs
- Understand the principles of Object-Oriented programming

PROGRAMMING CONCEPTS 2

- Create Java GUI frames
- Write code to react to events and exceptions
- Understand the MVC pattern

UNIFIED MODELING LANGUAGE

- Understand UML fundamentals
- Create Use Case, Class, Activity and State Machine diagrams

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 RED HAT (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

OR

MICROSOFT (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