



Certificate in Networking

With the advent of the internet, networking is now one of the most rewarding jobs. Households and organisations need to connect to the internet, making networking knowledge mandatory.

Why does the course exist – The course provides practical and theoretical knowledge for networking operating system.

How it fits into the larger programme – Networking is comparable to the telephone system – it is found almost everywhere – every organisation need to share resources – creating more chances of getting a job.

For whom it was designed – The Certificate in Networking course is designed for candidates who have completed the Information Technology or Certificate in Computer Fundamentals course or holders of equivalent qualifications interested in pursuing networking.

How it will benefit candidates – Candidates can look for employment or advance to the Diploma in IP Routing, Diploma in Unix and Windows Networking or Diploma in PC Repair & Structured Cabling.

Subjects:

- Networking Essentials
- Windows Client Networking
- Windows Server Administration & Implementation
- TCP/IP
- Network Security

Networking Essentials - basic concepts and principles that underline computer networking, from the simplest peer-to-peer local area networks to the vastly complex wide area networks that reach across international boundaries and around the world. Networking essentials is an overview of networking terminology, different network architectures, and focus on the physical components of computer networks, including server and client computers, cabling and connectors, network file sharing, area networks and network types, basic network topologies, network routers, network protocol, TCP/IP - Transmission Control Protocol / Internet Protocol, firewalls, Ethernet and network addresses.

Windows Client Networking – users sit on a client machine and forward information to the server. Understand the client machine network side is equally as important as understanding the server side. What makes client networking important is that users temper with a lot of things on their system, hence failure is common. Whereas the server is inaccessible (in most cases, servers are kept in remote places), hence secure and rare to common user faults. Even Administrators don't sit on the server, except in special circumstances (mostly access the server via a client machine).

Windows Server Administration & Implementation – Windows Server is an operating system which runs on the server computer. The person in charge of the server is called an Administrator and his/her responsibilities are administering users, groups, and domains in a network; including account administration, architecture, boot process, directory replication, directory services, group administration, installation, network services, administration tools, permissions, system policies, TCP/IP, and user profiles. Apart from the administration side, the server has system utilities, such as the registry monitor, the Windows file monitor, the NTFS file system, DNS, DHCP, WINS, and other services such as the kernel, core files NTLDR, NTOSKRNL.EXE, HAL.DLL, KERNEL32.DLL, NTDLL.DLL, SRV.SYS, TCPIP.SYS, WINSOCK.DLL, NTLANMAN.DLL, RASAUTH.DLL, NTFS.SYS which need to be monitored constantly.

TCP/IP – TCP/IP is a protocol used by all major network operating systems, including the routing protocols and the internet. Both Network Administrators and IT security professionals must have the fundamental knowledge of TCP/IP to do their jobs. With that comes a necessity to be able to analyse TCP/IP traffic in order to troubleshoot network problems, analyse attacks, and better understand and secure their systems. Computers need an IP address to be able to communicate with one another.

Network Security – The largest network in the world is the Internet. As long as one is using the internet, they are part of the network. This creates a major security issue. Not only people around your office, or in your neighbourhood, area, county, country BUT the entire world can try to access your data. Understanding network security prepares a nation against data theft hence can secure company or personal information, leading to saving millions for the country. Networking operating systems offers users an integrated network logon solution based on advanced public key technology. The Networking operating system verifies and authenticates the validity of each party involved in an electronic transaction and let users log on to a domain server using the additional security provided by smartcards. In today's world of electronic business transactions, organisations need a method to authenticate the identity and validity of users accessing information on computer networks. A public key infrastructure (PKI) is a system that provides solutions for secure eCommerce and network services. A PKI consists of protocols, services, and standards supporting applications of public key cryptography. In a PKI, every user is assigned a cryptographic key pair consisting of a public key and private key that are mathematically related. The public key is published, while the private key is kept secret.

Tel: 0044 7423211037

Email: info@londoncomputercollege.co.uk Website: www.londoncomputercollege.co.uk

Registered No: 3267009 (England)