

IT Technical Training

2010 Course Brochure



www.pitmantechnical.co.uk

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Pitman Technical has over 30 Years experience in the IT Training Industry

Our technical courses can support your Organization's IT infrastructure or enable you to start a new career in IT. Courses range from Desktop and PC Hardware Support (A+) to Microsoft Certified Systems Engineer (MCSE).

We offer a range of computer courses to help you achieve your goals.

You can learn at your own pace around your work, social and family commitments with support throughout.

If you are planning to take an IT course, there are different options available to you. If you want to learn from home, at your own pace and to fit around your own schedule, online IT training is the best choice. Otherwise, IT technical courses can be taken at our specialised, state of the art training centres run by our fully qualified course tutors or onsite IT training can be delivered at your place of employment or business.

Choosing a Training Method to Suit Your Needs

Instructor Led Seminars

These courses can be held at one of our fully equipped training centres, led by an experienced course trainer. These courses are ideal to fill any gaps in your knowledge and help towards your career advancement.

Online Training

Sometimes the ability to train directly from home or the work place is the key need. Courses can be studied through a Broadband connection, providing the perfect cost-effective training environment.

Blended Learning

Individuals are by nature different and therefore you may want a blended solution from the delivery styles above. Our team can help you tailor this to match your training aims and financial needs.

Networking - CompTIA Network+

This course is intended for students wanting to work in a network support technician role and wishing to qualify for the CompTIA Network+ Certification. It is also suitable for experienced technicians who require an industry-backed credential that validates their skills and knowledge. This course will particularly benefit students pursuing a career in network administration as a Network Support Technician, Network Engineer, Network Administrator or Help Desk support.

You will learn how to:

- Describe the features of different network protocols and products for LANs, WANs, and wireless networks
- Understand the functions and features of TCP/IP addressing and protocols
- Identify threats to network resources and appropriate security countermeasures
- Install and configure network cabling and appliances
- Manage, monitor and troubleshoot networks

Module 1 - Network Fundamentals

Network Topologies and the OSI Model:

- Network Basics
- Network Topologies
- The OSI Model
- Physical Layer
- Data Link Layer
- Network Layer
- Transport Layer
- Upper Layers of the OSI Model
- OSI Model Summary
- Network Protocols and TCP/IP

LAN and WLAN Technologies:

- IEEE 802 Standards
- Characteristics of Transmission Media
- Ethernet (IEEE 802.3)
- Wi-Fi (IEEE 802.11)

Cabling and Connectors:

- Selecting Network Cable
- Twisted Pair Cable (UTP / STP / ScTP)
- Coaxial Cable
- Fibre Optic Cable
- Serial Cabling and Connectors

WAN Technologies:

- WAN Overview
- Switched Networks
- Telecommunications Networks
- Packet-switched Services
- Local Loop Services
- Wireless WANs

Module 2 - Addressing and Protocols

Addressing:

- The TCP/IP Protocol Suite
- MAC Address
- Internet Protocol
- IP Routing
- Automatic Address Assignment
- ICMP
- IP Version 6

Routing Protocols:

- IP Routing
- Routers
- Routing Protocols

Transport Protocols:

- Transmission Control Protocol (TCP)
- User Datagram Protocol (UDP)
- TCP/IP Ports
- Name Resolution

Application Protocols:

- TCP/IP Services
- Email (SMTP / POP3 / IMAP)
- World Wide Web (HTTP)
- File Transfer Protocol (FTP)
- Telnet and Secure Shell (SSH)
- Conferencing and VoIP Protocols
- Simple Network Management Protocol (SNMP)
- Network Time Protocol (NTP)

Module 3 - Security and Authentication

Security Threats and Countermeasures:

- What Makes a Network Secure?
- Social Engineering
- Malware
- Network Attack Strategies
- Secure Network Management
- Corporate Security Policy
- Training

Network Security Appliances:

- Secure Network Topologies
- Firewalls and Proxy Servers
- Intrusion Detection Systems

Network Access Security and Authentication:

- Encryption
- Remote Connectivity Protocols
- Authentication Protocols
- Network Access Control

Module 4 - Installation and Implementation

Installing Network Infrastructure:

- Wiring Standards
- Wiring Distribution
- Cable Testing Tools
- Network Adapters
- Intranetwork and Internetwork Devices

Installing Wireless and Remote Networks:

- Setting up a Wireless Network
- Remote Connectivity

Advanced Network Infrastructure:

- Advanced Features of Switches
- QoS Appliances
- Configuring DHCP
- Configuring DNS
- Configuring Firewalls, Proxy Servers, and IDS

Module 5 - Management, Monitoring and Troubleshooting

Configuration Management:

- Policies and Procedures
- Schematics and Documentation

Monitoring:

- Network Performance Optimization
- Network Monitoring Utilities
- Logs

Troubleshooting:

- Troubleshooting Methodology
- Command Line Utilities
- Troubleshooting Connectivity Scenarios

MCSE Windows Server 2003

MCSE certification demonstrates your expertise in designing and implementing the infrastructure for business solutions based on the Microsoft Windows 2003 platform and Microsoft Windows Server System.

Examinations

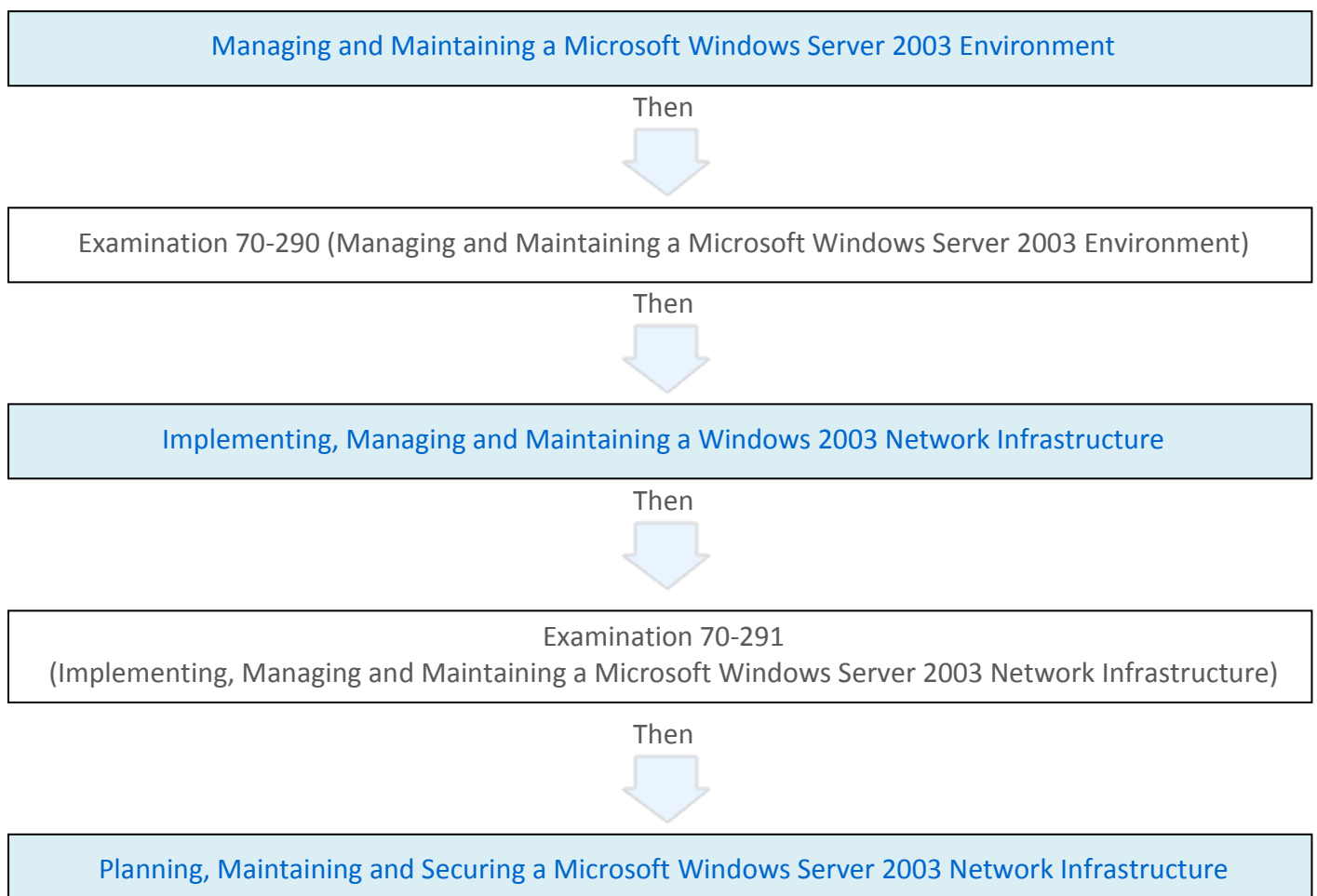
- Four networking system exams
- One client operating system exam
- One design exam
- Elective exam (One Exam Required)

Prerequisites

MCSE candidates would typically have at least one year of experience implementing and administering network operating systems and desktop operating systems.

Core Courses

The table below provides a complete list of exams and related training resources.



Then



Examination 70-293 (Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure)

Then



Planning, Implementing and Maintaining a Windows Server 2003 AD and NI

Then



Examination 70-294 (Planning, Implementing and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure)

Then



Implementing and Supporting Microsoft Windows XP Professional

Then



Examination 70-270 (Installing, Configuring and Administering Microsoft Windows® XP Professional)

Then



Examination 70-297
(Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure)

Then



Examination 70-298 (Designing Security for a Microsoft Windows Server 2003 Network)

Electives

Exchange 2003

Implementing and Managing Microsoft Exchange Server 2003

Then



Examination 70-284 (Implementing and Managing Microsoft Exchange Server 2003)

Or

Designing and Planning an Exchange Server 2003 Organization

Then



Examination 70-285 (Designing a Microsoft Exchange Server 2003 Organization)

MCSA Windows Server 2003

MCSA certification demonstrates your expertise in supporting the infrastructure for business solutions based on the Microsoft Windows 2003 platform and Microsoft Windows Server System. It is also possible to achieve MCSA certification with a Messaging or Security specialization.

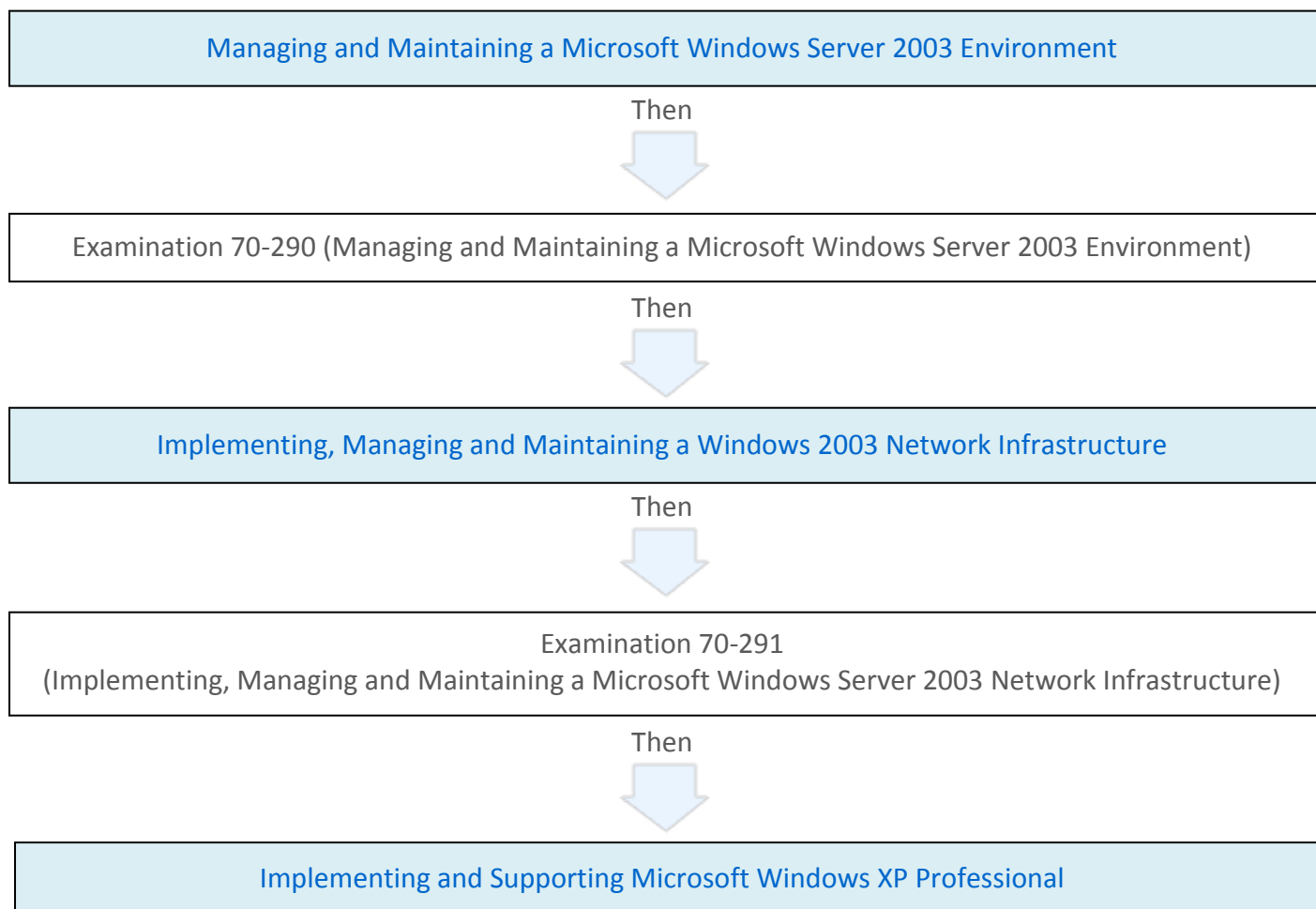
Examinations

- Two networking system exams
- One client operating system exam
- One elective exam

Prerequisites

Ideally you implement, manage and maintain the typically complex computing environment of medium to large sized companies and have 6–12 months of experience administering client and network operating systems.

Core Courses



Then



Examination 70-270 (Installing, Configuring and Administering Microsoft Windows® XP Professional)

Then



Electives

Fundamentals of Network Security

Then



Examination (CompTIA Security +)

Or

Implementing and Managing Microsoft Exchange Server 2003

Then



Examination 70-284 (Implementing and Managing Microsoft Exchange Server 2003)

Managing and Maintaining a Microsoft Windows Server 2003 Environment

This official Microsoft course provides students with the knowledge and skills that are required to manage accounts and resources, maintain server resources, monitor server performance and safeguard data in a Microsoft Windows Server™ 2003 environment.

You will learn how to:

- Create and manage groups
- Create and populate Organisational units with user and computer accounts
- Manage access to resources
- Implement printing
- Manage printing
- Manage access to objects in organizational units
- Implement Group Policy
- Prepare to administer server resources
- Configure a server to monitor system performance
- Manage device drivers by configuring device driver signing and restoring a device driver
- Maintain software by using Microsoft Software Update Services
- Manage the user and computer environment by using Group Policy
- Audit accounts and resources
- Monitor system performance
- Manage data storage
- Manage disaster recovery
- Manage hard disks
- Manage user and computer accounts

Implementing, Managing and Maintaining a Windows 2003 Network Infrastructure

By combining the Microsoft Official Curriculum with a focused and accelerated delivery you will be able to gain a deep understanding of Windows 2003 technologies in the shortest possible time.

You will learn how to:

- Configure a host to use a static IP address
- Assign IP addresses in a multiple subnet network
- Describe the IP routing process
- Configure a host to obtain an IP address automatically
- Configure a host so that automatic private IP address configuration is disabled
- Configure a host to use name servers
- Isolate common connectivity issues – Install and configure routing by using the Routing and Remote Access service
- Install and configure the DHCP Server service
- Manage and monitor DHCP
- Configure host and network basic input/output system (NetBIOS) names resolution
- Install and configure the DNS Server service
- Manage and monitor DNS
- Secure IP traffic by using IPsec and certificates
- Describe the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol architecture
- Calculate a subnet mask
- Convert Internet Protocol (IP) addresses between decimal and binary
- Create subnets
- Install, configure and manage WINS
- Implement a network access infrastructure by configuring the connections for virtual, dial-up and wireless clients
- Manage and monitor remote connections in a network access infrastructure

Planning, Maintaining and Securing a Microsoft Windows Server 2003 Network Infrastructure

This course provides students with the knowledge and skills to design a secure networking infrastructure. Particular emphasis is placed on understanding and managing TCP/IP.

You will learn how to:

- Plan a TCP/IP Physical and Logical Network
- Plan and Troubleshoot a Routing Strategy
- Plan and Troubleshoot Internet Connectivity Strategy
- Plan a Dynamic Host Configuration Protocol (DHCP) Strategy
- Select a Name Resolution Solution
- Optimize and Troubleshoot DNS
- Plan Remote Access
- Plan Network Traffic Monitoring and Information Management
- Design security for physical resources
- Design security for computers
- Design security for accounts
- Design security for network perimeters
- Plan and Optimize WINS
- Troubleshoot Remote Access
- Plan, Optimize, and Troubleshoot IPSec
- Plan a framework for network security
- Identify threats to network security
- Analyze security risks
- Design security for data
- Design security for data transmission
- Design an incident response procedure
- Optimize and Troubleshoot DHCP
- Plan DNS
- Design security for authentication

Planning, Implementing and Maintaining a Windows Server 2003 Active Directory and Network Infrastructure

This course focuses on a Windows Server 2003 directory service environment, including forest and domain structure, Domain Name System (DNS), site topology and replication, organizational unit structure and delegation of administration, networking for Active Directory, Group Policy, user group and computer account strategies.

You will learn how to:

- Design a forest and domain infrastructure that meets the needs of an organization
- Design a site infrastructure that meets the needs of an organization
- Design a Group Policy structure that meets the needs of an organization
- Design an administrative structure that meets the needs of an organization
- Design a physical network structure that supports Active Directory and meets the needs of an organization
- Design a name resolution strategy that supports Active Directory and meets the needs of an organization
- Design a Dynamic Host Configuration Protocol (DHCP) structure that supports Active Directory and meets the needs of an organization
- Describe the process of designing an Active Directory infrastructure and a network infrastructure that supports Active Directory
- Create a design for network connectivity that supports Active Directory and meets the needs of an organization
- Design a network access infrastructure that supports Active Directory and meets the needs of an organization

Fundamentals of Network Security

This course provides students with the knowledge and skills to begin supporting network security within an organization. Students who complete this course will be able to identify security threats and vulnerabilities and help respond to and recover from security incidents.

This course will cover security concepts that are prerequisites for attending other Microsoft Official Curriculum (MOC) courses for security specialists and help prepare students for the CompTIA Security+ exam.

You will learn how to:

- Explain common attacks against network assets, the associated threats and vulnerabilities and what network security personnel do to secure assets
- Explain how to use cryptography to help protect information and how to choose an appropriate encryption method for an organization
- Implement security-enhanced computing baselines in an organization
- Help protect information in an organization by using authentication and access control
- Deploy and manage certificates
- Help protect transmission of data by identifying threats to network devices and implementing security for common data transmission, remote access and wireless network traffic
- Help protect Web servers against common attacks and configure security for Web browsers
- Help protect e-mail messages and instant messaging from common security threats
- Identify common security threats and vulnerabilities to directory services and DNS, and then apply security methods to help protect them
- Identify network perimeter threats and monitor perimeter security for a network
- Identify types of security policies to manage operational security and then use these policies to ensure compliance by users in an organization
- Preserve business continuity by implementing a security-enhanced disaster recovery strategy, communicating risks to others and performing secure backup and recovery
- Identify, respond to and assist in the formal investigation of security incidents

Designing and Planning an Exchange Server 2003 Organization

This course provides students with the knowledge and skills necessary to successfully design and plan an Exchange Server 2003 organization in an enterprise network, including a plan for upgrading from previous versions of Exchange.

This course is intended for senior IT professionals with three or more years of messaging and network experience, including one year designing messaging infrastructures.

You will learn how to:

- Design a routing topology and server roles and placement
- Design inter-organizational connectivity
- Analyze Active Directory® and design an administrative plan
- Design public folders and client connectivity
- Design an Exchange Server 2003 security strategy
- Design for high availability and reliability
- Design an Exchange 5.5 to Exchange Server 2003 deployment strategy

Implementing and Managing Microsoft Exchange Server 2003

This course provides students with the knowledge and skills that are needed to update and support a reliable, secure messaging infrastructure. This infrastructure is used for creating, storing and sharing information by using Microsoft Exchange Server 2003 in a medium-sized to large-sized (250 to 5,000 users) messaging environment. This course offers a significant number of hands-on practices, discussions and assessments that assist students in becoming proficient in the skills that are needed to update and support Exchange Server 2003.

This course is intended for messaging support professionals who work in medium to large messaging environments (250 to 5,000 seats) with multiple physical locations, mixed-client connection protocols and wireless and Internet messaging connectivity.

You will learn how to:

- Perform an installation of Exchange Server 2003 and verify that the installation was successful
- Configure and manage Exchange Server 2003
- Secure Exchange Server 2003
- Manage recipients
- Manage public folders
- Manage address lists
- Implement and manage access to Exchange Server mailboxes for Internet protocol clients
- Manage client configuration and connectivity
- Manage routing
- Manage mobile devices with Exchange Server 2003
- Manage data storage and hardware resources
- Plan for disaster and disaster recovery
- Backup and restore Exchange Server
- Perform preventive maintenance
- Migrate users from Exchange Server 5.5 to a separate Exchange Server 2003 organization

Implementing and Supporting Microsoft Windows XP Professional

This course provides students with the knowledge and skills to successfully deploy and support Microsoft Windows XP Professional in a variety of stand-alone and network operating system environments. It provides in-depth, hands-on training for the Information Technology (IT) professionals responsible for the planning, implementation and support of Windows XP Professional.

You will learn how to:

- Configure and manage file systems
- Troubleshoot the boot process and other system issues
- Configure Windows XP Professional to operate on Windows networks
- Install Windows XP Professional and upgrade to Windows XP Professional
- Automate an installation of Windows XP Professional by using answer files and Uniqueness Database Files (UDFs) or by using the Microsoft Windows 2000 System Preparation Tool
- Configure and manage hardware on a computer running Windows XP Professional
- Manage Disks
- Configure the desktop environment and use profiles to control desktop customization
- Configure and support Transmission Control Protocol/Internet Protocol (TCP/IP)
- Support remote users
- Configure Windows XP Professional for mobile computing
- Monitor resources and performance

Computer Hardware - CompTIA A+

This course is intended for students wanting to work in an IT service desk personnel role and wishing to qualify for the CompTIA A+ Certification. It is also suitable for experienced technicians who require an industry-backed credential that validates their skills and knowledge. This course will particularly benefit students pursuing a career in IT, as an IT Support Technician, 1st & 2nd Line support or in Help Desk support

CompTIA A+ Certification: Essentials

Then



Examination 220-601 (CompTIA A+ Essentials)

Then



CompTIA A+ Certification: Electives

Then



Examination 220-602 (CompTIA A+ IT Technician)

CompTIA A+ Certification: Essentials

This course will teach the fundamental principles of supporting desktop and portable computers and operating systems. On course completion, students will be able to:

- Identify types and characteristics of PC components, including motherboard, CPU, memory and storage, input and output devices
- Install and configure peripheral devices
- Identify types and characteristics of portable computers
- Install and configure Microsoft Windows 2000 and Microsoft Windows XP
- Perform basic PC maintenance and troubleshooting
- Understand fundamental principles of securing IT systems and working safely
- Communicate effectively with customers
- Install and configure print and imaging devices
- Understand fundamental principles of implementing LANs and internet access

This course is intended for students wishing to qualify with CompTIA A+ Certification for PC Support professionals. It is also suitable for students wanting to improve their skills in PC support and administration.

Students should have successfully completed PC Fundamentals or have basic experience of using a PC, Windows and browsing the Web.

Module 1 - PC Components

The Visible PC:

- Introduction to the PC
- Key Functions of a PC
- The System Case
- I/O Ports and Cables
- PS2 Ports
- Parallel Ports
- Serial Ports
- USB Ports
- SCSI, IEEE 1394 (Firewire)
- Modem and Network Ports
- Audio Ports
- Joystick/MIDI Ports
- Adding and Removing Peripherals

Motherboards:

- Motherboard Layout
- System Clock
- Bus Architecture
- Motherboard Components
- Expansion Bus and Adapter Cards
- Motherboard Form Factors
- Power Supply Unit (PSU)

Processors:

- Central Processing Unit (CPU)
- Processor Terminology
- Multitasking
- Multiprocessing and Multithreading
- Intel Processors
- AMD Processors
- Processor Sockets and Chipsets

Memory Types:

- Memory Packaging
- Memory Characteristics

Storage Devices:

- Storage Devices
- Hard Drives
- Installing a Storage Device
- Preparing a Hard Disk
- Floppy Drives
- Optical Disk Storage
- Flash Memory
- Tape Drives

Peripheral Devices

- PC Display Screens
- Graphics Adapter
- Installing a Graphics Adapter and Display
- TV Tuners
- Sound Cards
- I/O and Communications Adapters

Module 2 - Portable Computers:

Portable Computers:

- Portable and Desktop Computers
- Notebooks
- Tablet PC
- Personal Digital Assistants (PDAs)

Module 3 - Operating Systems:

Features of Operating Systems:

- Microsoft Operating Systems
- Overview of Windows 2000
- Overview of Windows XP
- Workgroups and Domains
- UNIX and Linux
- Apple Mac OS X
- Novell NetWare

Installing and Upgrading Windows:

- Overview of OS Installations
- Preparing the Hard Disk
- Domain or Workgroup Selection
- Installation Methods
- Setup Failure and Recovery
- Upgrading the OS
- Options for Deploying Windows

The Windows Boot Process:

- Windows Boot Files
- Initial Start-up Process
- The BOOT.INI File

Managing Windows:

- Features of the Desktop
- Windows Administrative Tools
- Changing System Settings
- Configuring Hardware
- Optimising Windows Performance Options
- Screen Savers and Power Management
- Managing Software
- Managing Services

Windows Storage Management:

- Disk Management
- Navigating Windows
- Working with Folders
- Working with Files
- Searching For Files
- The Recycle Bin
- My Network Places

Module 4 - PC Support:

Hardware Maintenance and Troubleshooting:

- Troubleshooting Techniques
- Troubleshooting Power Problems
- Troubleshooting POST
- Troubleshooting Internal Devices
- Troubleshooting Peripheral
- Notebook Troubleshooting
- Preventative Maintenance

Troubleshooting the Operating System:

- Error Categories
- Advanced Start-up Options
- Diagnosing Problems
- Troubleshooting Applications
- Remote Features

Security Fundamentals:

- Windows Security Overview
- Internet Security
- Malware
- Data Security

Safety and Environmental Issues:

- Health and Safety
- Static Electricity and ESD
- Materials Handling
- Storage of Components for Future Use
- Disposal of Consumables and Computer Equipment

Professionalism and Communication:

- Customer Service Skills
- Basic Troubleshooting Approach
- Giving Feedback
- Communication with a Customer
- Professionalism
- Handling Customer Complaints

Module 5 - Printers and Scanners

Printers and Scanners:

- The Print Process
- Installing and Configuring a Printer
- Operating and Troubleshooting Printers
- Scanners
- Installing and Using a Scanner

Module 6: Networking:

Network Concepts:

- What is a Network?
- Network Components
- Network Topologies

- The OSI Model
- IEEE 802 Standards
- Network Devices
- Network Transport Protocols

Implementing a LAN Server and Peer-to-Peer Networks:

- Network Components
- Implementing a LAN
- Network Troubleshooting Basics

WAN and Internet Connectivity:

- Wide Area Networks and the Internet
- Accessing the Internet
- Cellular Devices, Voice-over-IP

CompTIA A+ Certification: Electives

This course will teach the essentials of installing and troubleshooting all types of PC hardware. On course completion, students will be able to:

- Describe PC support industry job roles
- Manage Windows using command line tools and edit the Registry
- Use Remote Tools to deploy, maintain, optimise and troubleshoot systems
- Use tools to recover or restore a damaged installation
- Configure and troubleshoot local network and wireless connections
- Configure and manage users, groups and shared resources
- Configure and secure internet connections and web browser software
- Perform preventative maintenance using approved tools and products
- Assemble, disassemble and upgrade PC and notebook components
- Configure and update BIOS/CMOS
- Troubleshoot, optimise and upgrade hardware
- Troubleshoot and maintain printers and scanners

This course is intended for students wishing to qualify with CompTIA A+ Certification for PC Support professionals. It is also suitable for students wanting to improve their skills in PC support and administration.

Module 1 - PC Support Industry

PC Support:

- Industry IT Technicians
- Remote Support
- Depot Technicians
- Problem Management
- Quality Assurance

Module 2 - Configuring and Troubleshooting the OS

Using the Command Prompt:

- Command Prompt and Text Editors
- Navigating Directories at the Command Prompt
- File Management using a Command Prompt

System Management Tools:

- Options for Deploying Windows
- Microsoft Management Console
- Windows Optimisation Tools
- Remote Utilities
- Windows Registry

System Recovery:

- Windows Troubleshooting
- System Restore
- Emergency Repair
- Data Backup

Module 3 - Network Support

Connectivity and Client Options:

- TCP/IP
- Configuring Network Properties
- Configuring Wireless Connections
- Configuring Client Options

Sharing Resources:

- Local and Domain User Accounts
- Creating User Accounts
- Planning and Implementing Groups
- Setting Share Permissions
- NTFS Folder and File Permissions
- Encrypting Files and Folders
- Auditing

Internet Standards and Applications:

- Overview of the Internet
- Development of the Internet
- Internet Services
- The World Wide Web
- Electronic Mail (Email)
- Newsgroups (Usenet)
- File Transfer Protocol (FTP)
- Telnet
- Instant Messaging
- Virtual Private Networks
- Domain Names
- Uniform Resource Indicator
- Internet Email Addresses

Configuring Internet Access:

- Accessing the Internet
- Web Browser Security
- Network Maintenance and Troubleshooting
- Troubleshooting Networks
- Testing TCP/IP

Module 4 - PC Maintenance and Troubleshooting:

PC Maintenance:

- Electrical Circuits
- Maintenance Toolkit
- Hazards
- Preventative Maintenance
- Maintaining Display Devices
- Maintaining Disk and Tape Drives
- Cleaning Inside the Case
- Power Problems

Installing and Removing Hardware:

- Disassembling a PC
- Removing Peripheral Devices
- Removing Storage Devices
- Reassembling the PC
- Adding and Removing Notebook Devices

BIOS, CMOS, and System Resources:

- BIOS and CMOS
- BIOS/CMOS Setup Programs
- System Resources
- Plug-and-Play

Troubleshooting and Optimisation:

- Diagnostic Hardware and Software
- Troubleshooting
- Upgrading and Optimising Hardware

Maintaining Printers and Scanners:

- Dot Matrix Printers
- Inkjet Printers
- Laser Printers
- Other Printer Types
- Scanners, Installing
- Maintaining and Upgrading Printers and Scanners
- Printer Troubleshooting
- Configuring and Troubleshooting Scanners

Website Development & Design - Dreamweaver CS5 Advanced Techniques

This course is ideally suited to those who want to push the boundaries of Dreamweaver with HTML5, CSS3, JQuery, Spry and more. Whether you are looking to create websites, intranets, email newsletters or other types of content, Dreamweaver offers a fast efficient way of doing so and knowing how to use it is the key.

You should be comfortable using a computer to perform functions such as copy and paste and opening applications and files. You should also be comfortable using the internet, for example, for browsing and interacting with websites. You should have completed the Dreamweaver CS5 Getting Started course or have equivalent experience.

Dreamweaver Training Course – Topics

- Buttons and Menus
- Using CSS with Javascript
- JQuery examples
- HTML 5
- HTML 5 and Video
- CSS3
- Creating Slideshows
- Images and Visual Effects
- Working with Dynamically Related Files
- Spry
- Comparing Browsers
- Javascript Experiments

Photoshop CS5 Getting Started or Advanced Techniques

Adobe Photoshop CS5 redefines digital imaging with powerful new photography tools and breakthrough capabilities for complex image selections, realistic painting, and intelligent retouching. Enjoy cross-platform 64-bit support and a wide range of workflow enhancements.

Students should be comfortable working with either the Windows or Mac operating systems and should feel at ease performing tasks such as copy and paste, open and save files, switch between windows and starting programs.

Getting Started Topics

- Exploring Photoshop
- Painting and Retouching Images
- Enhancing an Image
- Working with Layers and Selections
- Masks and Channels
- Correcting and Enhancing Digital Photos
- Typographic Design
- Importing/Exporting
- Basic Colour Theory
- Working with Brushes
- Shapes, Effects and Styles
- Cloning, Healing & Content Aware Fill
- Photoshop and Bridge
- Vanishing Point
- Further Photoshop training options

Advanced Techniques Topics

- Intro to the Advanced Photoshop training course
- Adobe Bridge & Mini Bridge
- Actions
- Advanced masking
- Advanced Cloning & Content Aware Fill
- Advanced Levels and Curves
- Advanced Compositing – Stacks
- Colour adjustment
- Sharpening
- Advanced layers
- Smart Objects, Smart filters & Smart Layers
- Vanishing Point
- Advanced filter techniques
- Painting Effects
- Warping techniques – Puppet Warp
- Camera Raw
- Photoshop Animation
- Photoshop Video
- Photoshop and Devices
- Adobe Repoussé
- HDR Pro

InDesign CS5 Getting Started or Advanced Techniques

Adobe InDesign CS5 provides precise control over typography and built-in creative tools for designing, preflighting, and publishing documents for print, online, or to mobile devices. Include interactivity, animation, video and sound in page layouts to fully engage readers.

Students should be comfortable working with either the Windows or Mac operating systems and should feel at ease performing tasks such as copy and paste, open and save files, switch between windows and starting programs.

Getting Started Topics

- Exploring InDesign
- Designing Documents
- Managing text
- Placing text
- Organising boxes and the Gap tool
- Live Corner Effects
- Style Sheets
- Columns
- Placing Images
- Colours, Swatches and Gradients
- Tables
- Masters
- Preparing a document for print
- Basic object editing
- OpenType
- Creating PDFs
- Keyboard shortcuts and Customisation

Advanced Techniques Topics

- More about Masters
- Sections
- Creating Interactive PDFs
- Text Flow Control
- Page Elements and Graphics
- Document Sectioning
- Managing Long Documents
- Print Settings
- Advanced tables
- Transparency
- Advanced Textual techniques including tracking changes
- InDesign and data
- Customising
- Bézier Shapes
- GREP
- Live Captions

Flash CS5 Getting Started or Advanced Techniques

Adobe Flash Professional CS5 is the industry standard for interactive authoring and delivery of immersive experiences that present consistently across personal computers, mobile devices, and screens of virtually any size and resolution.

Students should be comfortable working with either the Windows or Mac operating systems and should feel at ease performing tasks such as copy and paste, open and save files, switch between windows and starting programs.

Getting Started Topics

- Working in Flash
- Creating and Importing Graphic Assets
- Using Text Effectively
- Creating Animations
- 3D transformations
- Inverse Kinematics and Spring for Bones
- Tweening
- Creating animations – New School (Motion tweens)
- Adding ActionScript
- Using Moving Clips
- Adding Sound and Video
- Publishing Flash Documents
- Creating Animations – Old School
- Adobe AIR
- Flash and Other Applications
- Using Flash to Draw
- A simple design & a simple application – case study

Advanced Techniques Topics

- Audio techniques
- Video techniques
- 2.5D
- 3D
- Custom Motion presets
- Inverse Kinematics
- Deco Tool
- Extending Flash
- Components
- Outputting to mobile devices
- Flash and Flash Builder

Programming - ActionScript 3 Getting Started

ActionScript is a scripting language owned by Adobe. It is based on ECMAScript and is used primarily for the development of websites and software using the Adobe Flash Player platform (in the form of SWF files embedded into Web pages. ActionScript adds functionality allowing for the creation of Web-based games and rich Internet applications with streaming media. It is often possible to save time by scripting something rather than animating it, which usually also enables a higher level of flexibility when editing.

This course is designed to teach programming skills and involves extensive coding.

Course Outline

- Variables
- Functions
- Objects, Properties, Methods and Classes
- Iteration
- Display Object
- Accessing Display Objects
- Events
- Animation
- What is a class?
- Creating Custom Classes
- Introducing Components and Data
- UI Components
- Video Components
- Data Binding
- Database Integration
- Customising Components
- Creating Your Own Components
- Introducing Flex & AIR

Web Programming with JavaScript

From simple validation messages through to interactive menus, users expect modern web pages to be dynamic. HTML however is a static document mark-up language. One approach to adding interaction is to create active content such as Macromedia Flash, Java applets and ActiveX controls. Such approaches require specialist programming or design skills. The alternative is a scripting language that can be placed within the HTML page, which brings more power and flexibility to the user's browser.

Prerequisites

Students should have experience of a block-structured language such as C, Java, Visual Basic, VBScript, REXX or Perl. Students should also have a working knowledge of the Internet, building Web pages and using HTML.

You will learn how to:

- Add javascript to a web page and cope with non-scripting browsers
- Write code that is efficient and robust
- Perform validation using javascript and HTML forms
- Create image rollovers and other dynamic image techniques
- Define your own javascript object types
- Create complex applications incorporating multiple windows and frames
- Use javascript to create dynamic HTML
- Write cross-browser javascript code
- Create sophisticated Web pages using javascript
- Use javascript in AJAX scenarios

Developing XML-Based Applications

Nowadays XML is widely used as an underlying technology in most, if not all, eCommerce solutions in both Business-to-Consumer (B2C) and Business-to-Business (B2B) environments. As understanding grows of the situations in which XML can be applied, more and more people are building XML into their enterprise applications.

This course describes how to use XML for data modelling and in all facets of application development and integration. You will learn how to use XML to model business data effectively and use XML to create web-based solutions and e-commerce systems.

Since XML is supported by a variety of tools and platforms, this course aims to provide insight into how XML can be used in the major current environments. Examples illustrate Microsoft solutions, Java Enterprise Edition solutions and other commercial platforms and product suites.

This comprehensive course will help you understand how best to apply XML in your data modelling and application development projects. The hands-on practice will deliver the confidence for its use.

Prerequisites

- Students should have a basic understanding of XML, the Internet and distributed systems
- Students must be proficient in at least one modern programming language such as C#, VB.NET, Java, Perl, JavaScript

You will learn how to:

- Understand XML syntax and the capabilities of XML
- Define XML grammars and validate documents
- Use XSLT to transform XML documents
- Program with XML APIs based on DOM, SAX and StAX
- Understand Web Services, security and SOA
- Create and deploy a Web Service Endpoint
- Use XML in web applications and database applications
- Leverage XML for use in Enterprise System

Java Programming Language

The Java Programming Language course provides students with information about the syntax of the Java programming language; object-oriented programming with the Java programming language; creating graphical user interfaces (GUIs), exceptions, file input/output (I/O) and threads; and networking. Programmers familiar with object-oriented concepts can learn how to develop Java technology applications. The course features the Java Platform, Standard Edition 6 (Java SE 6) platform and utilizes the Java SE Development Kit 6 (JDK 6) product.

Students who can benefit from this course are programmers who are interested in adding the Java programming language to their list of skills and students who are preparing for the Sun Certified Programmer for Java examination.

Prerequisites

- Be competent in creating programs in any programming language or have completed SL-110-SE6: Fundamentals of the Java Programming Language
- Create and edit text files using a text editor

You will learn how to:

- Create Java technology applications that leverage the object-oriented features of the Java language, such as encapsulation, inheritance and polymorphism
- Execute a Java technology application from the command line
- Use Java data types and expressions
- Use Java flow control constructs
- Use arrays and other data collections
- Implement error-handling techniques using exception handling
- Create an event-driven graphical user interface (GUI) using Swing components: panels, buttons, labels, text fields and text areas
- Implement input/output (I/O) functionality to read from and write to data and text files and understand advanced I/O streams
- Create a simple Transmission Control Protocol/Internet Protocol (TCP/IP) networked client that communicates with a server through sockets
- Create multithreaded programs

C++ for non-C Programmers

C++ is undoubtedly the most widely-used programming language for implementing object-oriented systems. The C++ language is based on the popular C language. However, the demand for the language has expanded beyond C programmers looking to upgrade to C++, and a number of C programming practices and features are not required, or are seen as detrimental in C++ programs.

This is a highly practical course which uses a mix of tuition and practical sessions for each technical chapter, designed to reinforce the C++ syntax and object-oriented programming techniques covered in the course.

Prerequisites

- Developers with solid programming experience but little or no recent C
- Students must have solid experience of another modern high-level language, including writing and using Functions/procedures/subroutines
- Knowledge of structured data types such as arrays, structs or records
- An understanding of scoped variables (i.e local vs. global data)
- Students with less than four months of recent C programming may find this course more appropriate than C++ for C Programmers. Students with less than six months of programming experience or with a mainframe background should first attend the C++ Primer course and follow it up with some practical work

You will learn how to:

- Understand the key concepts and vocabulary of object orientation
- Use fundamental and composite data types
- Define and use classes
- Write class member functions
- Use pointers and dynamic memory
- Use constructors and destructors
- Write code that is efficient and robust
- Build new classes from other classes using aggregation and association
- Build new classes from other classes using inheritance
- Use container classes, including template classes
- Use operator overloading
- Design and write code with polymorphic behaviour