

# **Courses Breakdown**

**Technical General**

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# A+ 2001 Hardware and Operating System Certification Series

**Total Time: 49 hours**

## **A+ 2001 Hardware and Operating System Certification: Computer Introduction**

**5 hours**

**APLU01**

*A+ 2001 Hardware and Operating System Certification: Computer Introduction provides an overview of computer repair and systems.*

- Working on Computers
- Personal and Environmental Safety
- Safe Electrical Handling
- Basic Computer Structure
- The Computer System
- The System Components
- Connected Peripherals
- Computer Software

## **A+ 2001 Hardware and Operating System Certification: The System Board**

**5 hours**

**APLU02**

*A+ 2001 Hardware and Operating System Certification: The System Board explains key concepts of system board operation, and what is necessary to install, maintain, and repair the system board.*

- Chip Sets
- Microprocessors
- Memory Systems
- Advanced Memory Structures
- Addressing Input/Output Devices
- Adapter Cards
- Troubleshooting the Board
- Hardware Troubleshooting

## **A+ 2001 Hardware and Operating System Certification Connecting Peripherals**

**4 hours**

**APLU03**

*A+ 2001 Hardware and Operating System Certification: Connecting Peripherals explains what is needed to install, maintain, and repair peripherals.*

- Expansion Slots
- Parallel Ports
- Serial Ports
- Troubleshooting Port Problems
- Power Supplies
- Troubleshooting Peripherals

## **A+ 2001 Hardware and Operating System Certification: Operating Systems**

**2 hours**

**APLU04**

*A+ 2001 Hardware and Operating System Certification: Operating Systems provides an overview of the computer system bootup procedure and the role of the operating system.*

- Introduction to Operating Systems
- Bootup Initialisation
- Bootup CMOS Setup
- The Bootup Routine

**A+ 2001 Hardware and Operating System Certification: MS-DOS** **5 hours** **APLU05**

*A+ 2001 Hardware and Operating System Certification: MS-DOS explains what is needed to install, use, and configure the MS-DOS operating system.*

- MS-DOS Structure
- DOS Disk Structure
- DOS Commands and Utilities
- Drives and Directories
- Files and Filenames
- Basic DOS Memory
- Additional DOS Memory
- Configuring DOS
- Installing DOS

**A+ 2001 Hardware and Operating System Certification: Windows 9x and 2000** **3 hours** **APLU06**

*A+ 2001 Hardware and Operating System Certification: Windows 9x and 2000 provides an overview of the use of the Windows 9x and Windows 2000 operating systems, and how to install, use, and configure these operating systems.*

- Installing Windows 9x and 2000
- Starting Windows 9x and 2000
- Using Windows
- Installing Windows 9x and 2000

**A+ 2001 Hardware and Operating System Certification: Disk Drives** **3 hours** **APLU07**

*A+ 2001 Hardware and Operating System Certification: Disk Drives explains how to install, maintain, and repair disk drives.*

- Introduction to Disk Drives
- Disk Drive Operations
- Floppy Disk Drives
- Hard Drives
- Hard Drive Interfaces
- Hard Drive Installation
- Hard Drive Troubleshooting

**A+ 2001 Hardware and Operating System Certification: Monitors** **3 hours** **APLU08**

*A+ 2001 Hardware and Operating System Certification: Monitors explains how to operate, maintain, and repair monitors.*

- Introduction to Monitors
- VGA Adapters
- Video Troubleshooting
- Servicing the Monitor

**A+ 2001 Hardware and Operating System Certification: Modems** **3 hours** **APLU09**

*A+ 2001 Hardware and Operating System Certification: Modems explains how to install, maintain, and troubleshoot internal and external modems in Windows systems.*

- Introduction to Modems
- Communication Protocols
- The Serial Interface
- Communicating with the Modem
- Troubleshooting Modems

**A+ 2001 Hardware and Operating System Certification: Printers**

**6 hours**

**APLU10**

*A+ 2001 Hardware and Operating System Certification: Printers explains how to use and install dot matrix, ink-jet, and laser printers, as well as how to troubleshoot them.*

- Types of Printers
- Installing Printers
- Dot-Matrix Printers
- Troubleshooting Dot-Matrix Printers
- Ink-Jet Printers
- Troubleshooting Ink-Jet Printers
- Laser Printers
- Troubleshooting Laser Printers
- Troubleshooting Windows Print Problems

**A+ 2001 Hardware and Operating System Certification: Networks**

**4 hours**

**APLU11**

*A+ 2001 Hardware and Operating System Certification: Networks explains how to install and maintain networks.*

- Local Area Networks
- LAN Protocols
- LAN Setup
- Troubleshooting LANs
- Wide Area Networks
- Using WANs/The Internet

**A+ 2001 Hardware and Operating System Certification: Troubleshooting**

**3 hours**

**APLU12**

*A+ 2001 Hardware and Operating System Certification: Troubleshooting explains how to troubleshoot common system problems.*

- Initial Troubleshooting Tips
- Software Diagnostics
- Hardware Troubleshooting
- Tracking Down Problems
- Operating Systems Troubleshooting
- Problems Starting Windows 9x and 2000
- Isolating Windows 9x and 2000 Problems

**A+ 2001 Hardware and Operating System Certification: Maintenance Tasks**

**3 hours**

**APLU13**

*A+ 2001 Hardware and Operating System Certification: Maintenance Tasks explains how to clean and otherwise maintain the main components of computers, and provides a schedule of preventive maintenance procedures.*

- Preventive Maintenance
- Preventing and Detecting Viruses
- Maintaining Hard Drives
- Maintaining Floppy Disk Drives
- Maintaining Printers

# C Series

**Total Time: 30 hours**

<b>C in 21 Days: Week 1</b>	<b>10 hours</b>	<b>CLGC01</b>
<i>C in 21 Days: Week 1 begins with a basic explanation of C components and quickly progresses to writing and debugging C programs. Sample listings, complete with sample output and an analysis of code, illustrate the topics of the day.</i>		
<ul style="list-style-type: none"><li>• Day 1: Getting Started</li><li>• Day 2: The Components of a C Program</li><li>• Day 3: Numeric Variables and Constants</li><li>• Day 4: Statements, Expressions, and Operators</li></ul>	<ul style="list-style-type: none"><li>• Day 5: Functions - The Basics</li><li>• Day 6: Basic Program Control</li><li>• Day 7: Basic Input/Output</li><li>• Week 1 in Review</li></ul>	

<b>C in 21 Days: Week 2</b>	<b>10 hours</b>	<b>CLGC02</b>
<i>C in 21 Days: Week 2 covers pointers and variable scope, concepts that are important to capitalizing on C's assets. It also covers numeric arrays, characters and strings, and structures. It introduces additional program control statements, provides detailed explanations of functions, and presents alternative functions. Sample listings, complete with sample output and an analysis of code, illustrate the topics of the day.</i>		
<ul style="list-style-type: none"><li>• Day 8: Numeric Arrays</li><li>• Day 9: Pointers</li><li>• Day 10: Characters and Strings</li><li>• Day 11: Structures</li></ul>	<ul style="list-style-type: none"><li>• Day 12: Variable Scope</li><li>• Day 13: More Program Control</li><li>• Day 14: Working with the Screen, Printer, and Keyboard</li><li>• Week 2 in Review</li></ul>	

<b>C in 21 Days: Week 3</b>	<b>10 hours</b>	<b>CLGC03</b>
<i>C in 21 Days: Week 3 begins with advanced pointer topics and moves on to the use of disk files for data storage and retrieval. It also covers advanced function topics and explores the function library in more detail. The week ends with a discussion of memory management, header files, and pre-processor directives. Sample listings, complete with sample output and an analysis of code, illustrate the topics of the day.</i>		
<ul style="list-style-type: none"><li>• Day 15: More on Pointers</li><li>• Day 16: Using Disk Files</li><li>• Day 17: Manipulating Strings</li><li>• Day 18: Getting More from Functions</li></ul>	<ul style="list-style-type: none"><li>• Day 19: Exploring the Function Library</li><li>• Day 20: Odds and Ends</li><li>• Day 21: Taking Advantage of Pre-processor Directives and More</li><li>• Week 3 in Review</li></ul>	

# WeTeachYou Series on CCDA

**Total Time: 32 hours**

This series of courses is designed to help you prepare for the Cisco Certified Design Associate certification exam. Each of the 60 objectives on the CCDA exam will be covered, and the questions will be indicative of the types of questions on the exam.

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<b>CCDA: Internetworking Review</b>	<b>3 hours</b>	<b>CCDA01</b>
<i>CCDA: Internetworking Review provides an overview of internetworking, with respect to the network design.</i>		
<ul style="list-style-type: none"><li>• Types of Networks</li><li>• The OSI Reference Model</li></ul>	<ul style="list-style-type: none"><li>• Routed Protocols</li><li>• Routing Protocols</li></ul>	

<b>CCDA: LAN Networking</b>	<b>4 hours</b>	<b>CCDA02</b>
<i>CCDA: LAN Networking describes the types of LAN networks and how they operate.</i>		
<ul style="list-style-type: none"><li>• Basic Concepts</li><li>• Ethernets</li><li>• Token Rings and FDDIs</li></ul>	<ul style="list-style-type: none"><li>• Bridges</li><li>• Switches</li><li>• Routers</li></ul>	

<b>CCDA: WAN Networking</b>	<b>3 hours</b>	<b>CCDA03</b>
<i>CCDA: WAN Networking describes types of WANs and their operation.</i>		
<ul style="list-style-type: none"><li>• Basic Concepts</li><li>• WAN Protocols</li></ul>	<ul style="list-style-type: none"><li>• WAN Issues</li><li>• ATM Switching</li></ul>	

<b>CCDA: Introduction to Design</b>	<b>3 hours</b>	<b>CCDA04</b>
<i>CCDA: Introduction to Design provides the initial steps to take when designing a network.</i>		
<ul style="list-style-type: none"><li>• Customer Considerations</li><li>• Network Topologies</li></ul>	<ul style="list-style-type: none"><li>• Addressing</li><li>• Network Traffic</li></ul>	

**CCDA: Examining Existing Networks****3 hours****CCDA05**

*CCDA: Examining Existing Networks provides the procedures to assessing the customer's existing network design.*

- The Steps of Evaluation
- Assessing Software and Hardware
- Assessing Traffic and Bottlenecks
- Assessing Performance and Related Issues
- Assessing Network Health

**CCDA: Designing LANs****4 hours****CCDA06**

*CCDA: Designing LANs provides the procedures to designing a LAN network.*

- 10 Mbps Ethernets
- 100- and 1000-Mbps Ethernets
- Additional Hardware Rules
- Choosing Hardware
- Examples of LAN Designs

**CCDA: Designing WANs****3 hours****CCDA07**

*CCDA: Designing WANs provides the procedures for designing a WAN network.*

- Introduction to WAN Design
- WAN Technologies
- WAN Hardware
- Provisioning the WAN

**CCDA: Specific Design Issues****4 hours****CCDA08**

*CCDA: Specific Design Issues provides methods to assess and optimise specific and cross-platform design issues.*

- Defining Protocols
- Factors Affecting Transmission
- Compression and Encryption
- Network Security
- Specific Designs

**CCDA: Optimising by Design****2 hours****CCDA09**

*CCDA: Optimising by Design provides the information to optimise your network design.*

- Quality of Service
- Implementing QoS
- Cisco-Specific Optimising

**CCDA: Testing and Managing****3 hours****CCDA10**

*CCDA: Testing and Managing provides ways to test your design and manage it when it is operational.*

- The Design Document
- Building the Test Model
- Testing the Model

# WeTeachYou Series on CCNA

**Total Time: 73 hours**

This series of courses is designed to help you prepare for the Cisco Certified Network Associate certification exam. Each of the 60 objectives on the CCNA exam will be covered, and the questions will be indicative of the types of questions on the exam.

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<b>CCNA: OSI Reference Model</b>	<b>4 hours</b>	<b>SCOC01</b>
<i>CCNA: OSI Reference Model describes the OSI reference model and uses it to explain types of networks and networking functions.</i>		
<ul style="list-style-type: none"><li>• Introduction to Networking</li><li>• The Upper OSI Layers</li></ul>	<ul style="list-style-type: none"><li>• The Lower OSI Layers</li><li>• Using a Layered Model</li></ul>	

<b>CCNA: Networks and Data Transfer</b>	<b>4 hours</b>	<b>SCOC02</b>
<i>CCNA: Networks and Data Transfer uses the OSI reference model to show how networks encapsulate data and transfer it throughout a network. This course also introduces routing as a method of data transfer.</i>		
<ul style="list-style-type: none"><li>• Communication between Layers</li><li>• Connection and Data Flow</li></ul>	<ul style="list-style-type: none"><li>• The Data Link Layer</li><li>• Network Addressing</li></ul>	

<b>CCNA: Local Area Networking</b>	<b>4 hours</b>	<b>SCOC03</b>
<i>CCNA: Local Area Networking describes the components and operation of Ethernets, Fast Ethernets, Token Ring and FDDI local area networks.</i>		
<ul style="list-style-type: none"><li>• Introduction to LANs</li><li>• Ethernet</li></ul>	<ul style="list-style-type: none"><li>• Fast Ethernet</li><li>• Token Ring and FDDI</li></ul>	

**CCNA: Wide Area Networking****4 hours****SCOC04**

*CCNA: Wide Area Networking describes WAN components and protocols and how they function in a wide area network. Special emphasis is placed on PPP, ISDN, X.25, and Frame Relay.*

- Introduction to WANs
- WAN Protocols
- PPP
- ISDN
- X.25
- Frame Relay

**CCNA: Using a Router****4 hours****SCOC05**

*CCNA: Using a Router introduces the different types of routing protocols, their use, and the function of routers.*

- Routing
- Distance Vector Routing
- Link State Routing
- Understanding Routers

**CCNA: Introduction to IOS****4 hours****SCOC06**

*CCNA: Introduction to IOS explains the basic operation of the Internet work Operating System.*

- Router Start-up
- Router Start-up in Setup Mode
- EXEC Mode Commands
- Router Status
- Loading Configuration Files

**CCNA: IOS Configuration****4 hours****SCOC07**

*CCNA: IOS Configuration shows how to configure passwords and banners, and introduces interface and protocol configurations for the Internet work Operating System.*

- Passwords, Identification, and Banners
- Configuring Interfaces
- Sample Interface Configurations
- Configuring Protocols

**CCNA: Network Management****4 hours****SCOC08**

*CCNA: Network Management shows how to set up and maintain a network system.*

- LAN Congestion
- Network Segmentation
- Network Management System
- Cisco FastHub 300

**CCNA: Bridges and Switches**

**4 hours**

**SCOC09**

*CCNA: Bridges and Switches shows how to build and operate network bridges and switches.*

- The Spanning Tree
- Bridges
- Switches
- ATM Switching
- Cisco Catalyst 1900/2820 Switches

**CCNA: TCP/IP Networking**

**4 hours**

**SCOC10**

*CCNA: TCP/IP Networking explains the functions of TCP/IP and how to manage it and other transport and network layer protocols.*

- Overview of TCP/IP
- Transport Layer Protocols
- TCP Specifics
- Internet Layer Protocols

**CCNA: IP Addressing**

**4 hours**

**SCOC11**

*CCNA: IP Addressing shows how to assign and use IP addresses.*

- The IP Address
- Subnetting
- Supernetting

**CCNA: IP Routing**

**4 hours**

**SCOC12**

*CCNA: IP Routing explains how to configure IP addresses and implement IGRP routing protocol.*

- Configuring IP Addresses
- Basic Routing Configurations
- Interior Gateway Routing Protocols
- Exterior Gateway Routing Protocols

**CCNA: IPX Networking**

**4 hours**

**SCOC13**

*CCNA: IPX Networking explains how to operate and manage Novell's IPX protocol and addresses.*

- IPX Protocols
- IPX Addressing and Encapsulation
- Configuring IPX
- Showing IPX Configurations

**CCNA: Network Security and Control****4 hours****SCOC14**

*CCNA: Network Security and Control describes the components and operation of access lists for filtering network traffic.*

- Introduction to Network Security
- Introduction to Access Lists
- Configuring IP Access Lists
- Configuring IPX Access Lists
- Showing Access Lists

**CCNA: Additional Configurations****5 hours****SCOC15**

*CCNA: Additional Configurations describes how to configure and verify ISDN, X.25, and Frame Relay routing. It also explains the operation of Frame Relay and other components of the network.*

- ISDN
- Showing ISDN Configurations
- X.25
- Frame Relay
- Features

**CCNA: Exam Preparation 1****4 hours****SCOC16**

*CCNA: Exam Preparation 1 provides practice exams that mimic the written portion of the CCNA test.*

- Exam Procedures
- Practice Exam 1
- Practice Exam 2

**CCNA: Exam Preparation 2****4 hours****SCOC17**

*CCNA: Exam Preparation 2 provides practice exams that mimic the written portion of the CCNA test.*

- Practice Exam 4
- Practice Exam 5
- Practice Exam 6

**CCNA: Numbering Systems****4 hours****SCOC18**

*CCNA: Numbering Systems introduces the alternative base numbering systems that are used in Cisco management.*

- Decimal
- Binary
- Hexadecimal
- Conversion Exercises

# Data Warehousing Series

**Total Time: 8 hours**

<b>Data Warehousing: Concepts</b>	<b>4 hours</b>	<b>DWHC01</b>
<i>Data Warehousing: Concepts provides an overview of data warehousing concepts, including their use, components, and structures.</i>		
<ul style="list-style-type: none"><li>• Introduction to Data Warehousing</li><li>• Managing Data with Data Warehousing</li></ul>	<ul style="list-style-type: none"><li>• Data Warehouse Components</li><li>• Data Models and Structures</li></ul>	

<b>Data Warehousing: Management</b>	<b>4 hours</b>	<b>DWHC02</b>
<i>Data Warehousing: Management provides an introduction to designing, building, and maintaining a data warehouse.</i>		
<ul style="list-style-type: none"><li>• Identifying Requirements</li><li>• Designing and Implementing the Warehouse</li><li>• Maintaining a Data Warehouse</li></ul>	<ul style="list-style-type: none"><li>• Matching Warehouses to Requirements</li><li>• Supporting Warehouse Needs</li><li>• Business Management of Data Warehouses</li></ul>	

# FOCUS Series

**Total Time: 75 hours**

## **FOCUS: Getting Started**

**4 hours**

**FOCS01**

*FOCUS: Getting Started provides an introduction to the FOCUS environment and its features and terminology.*

- General Concepts
- File Structures
- Master File Descriptions
- Facilities for End Users
- More Facilities for End Users
- Application Developer Facilities

## **FOCUS: Working with FOCUS**

**4 hours**

**FOCS02**

*FOCUS: Working with FOCUS shows users how to work in FOCUS using TED.*

- General TED Concepts
- TED Commands
- Terminal Operator Environment
- Types of Windows
- WINDOW Commands

## **FOCUS: Basic Report Preparation**

**3 hours**

**FOCS03**

*FOCUS: Basic Report Preparation shows users how to create simple reports using FOCUS.*

- Course Conventions and Databases
- Starting a Simple Report
- Printing Values
- Creating Report Requests
- Record Selection

## **FOCUS: Creating Simple Reports**

**4 hours**

**FOCS04**

*FOCUS: Creating Simple Reports shows users how to use FOCUS to create simple reports.*

- Course Conventions and Databases
- Line and Page Formatting
- Headings and Footings
- Techniques for Formatting Reports
- FOCUS Hot Screen
- Using the Hot Screen

## **FOCUS: Creating Complex Reports**

**4 hours**

**FOCS05**

*FOCUS: Creating Complex Reports shows users how to use various techniques to create sophisticated reports with FOCUS.*

- Course Conventions and Databases
- Advanced Sorting Techniques
- Creating Matrix Reports
- Additional Formatting Options
- Ranking Data
- Subtotalling Operations
- The WHEN Clause

**FOCUS: Additional Reporting Techniques****4 hours****FOCS06**

*FOCUS: Additional Reporting Techniques explains what you need to know in order to perform additional reporting techniques.*

- Course Conventions and Databases
- The JOIN Command
- The MATCH Command
- HOLD and PCHOLD Files
- SAVE and SAVB Files
- Retrieving Data

**FOCUS: Fundamentals of Graphs****2 hours****FOCS07**

*FOCUS: Fundamentals of Graphs provides an introduction to graphing concepts and techniques used in FOCUS.*

- Conventions and Graph Types
- Graph Requirements
- Setting Graph Parameters
- Bar Charts
- Bar Chart Parameters
- Histograms

**FOCUS: Advanced Graph Topics****4 hours****FOCS08**

*FOCUS: Advanced Graph Topics explains how to create and format graphs for presentation on various types of platforms.*

- Conventions and Graph Types
- Connected Point Plots
- Scatter Diagrams
- Adjusting Graphs
- Display Options

**FOCUS: Data Manipulation for Reporting****4 hours****FOCS09**

*FOCUS: Data Manipulation for Reporting explains how to create and format graphs for presentation on various types of platforms.*

- Course Conventions and Databases
- Expressions
- Prefix Operators
- The COMPUTE Command
- The DEFINE Command
- Comparing COMPARE and DEFINE

**FOCUS: Advanced Screening Techniques****4 hours****FOCS10**

*FOCUS: Advanced Screening Techniques explains how to create and format graphs for presentation on various types of platforms.*

- Course Conventions and Databases
- DECODE and EDIT
- INCLUDES and EXCLUDES
- Screening on Masked Fields
- Screening Accumulated Data
- Additional Screening Procedures

**FOCUS: Creating File Definitions****4 hours****FOCS11**

*FOCUS: Creating File Definitions explains how to create and format graphs for presentation on various types of platforms.*

- Course Conventions and Databases
- Describing the File
- Describing Segments
- Field Declaration

**FOCUS: Adjusting File Definitions****4 hours****FOCS12**

*FOCUS: Adjusting File Definitions shows users how to adjust file definitions in FOCUS.*

- Course Conventions and Databases
- Field Attributes
- Editing Options
- Additional Ways to Describe Fields
- Creating an MFD

**FOCUS: Accessing External Files****2 hours****FOCS13**

*FOCUS: Accessing External Files shows users how to describe external files to FOCUS.*

- Defining External Files
- Fixed Format Files
- Variable Segment Files
- Other DBMS Files
- Optional Interfaces

**FOCUS: Basic MODIFY Requests****4 hours****FOCS14**

*FOCUS: Basic MODIFY Requests provides an overview of the basic MODIFY requests in FOCUS.*

- What is MODIFY?
- Entering a Basic MODIFY Request
- Reading and Describing Data
- FREEFORM
- PROMPT and CRTFORM

**FOCUS: Segment Modification****4 hours****FOCS15**

*FOCUS: Segment Modification provides further instruction in maintaining and understanding files and databases in FOCUS.*

- The MATCH Statement
- Root Segments
- Updating Segment Instances
- Deleting Segment Instances
- Modifying Unique Segments
- Modifying Descendent Segments

**FOCUS: Complex MODIFY Requests****4 hours****FOCS16**

*FOCUS: Complex MODIFY Requests provides an overview of the use of FOCUS and how to use it to perform complex MODIFY Requests.*

- Course Conventions
- Course Databases
- The COMPUTE Statement
- The VALIDATE Statement

**FOCUS: Additional File Maintenance****3 hours****FOCS17**

*FOCUS: Additional File Maintenance provides further instruction in maintaining and understanding files and databases in FOCUS.*

- Course Databases
- Messages
- The LOG Statement
- Case Logic
- Branching
- Designing a Sample Application

**FOCUS: Dialogue Manager and FIDEL****4 hours****FOCS18**

*FOCUS: Dialogue Manager and FIDEL provides an advanced look at the Dialogue Manager and FIDEL features found in FOCUS.*

- Course Conventions and Databases
- Dialogue Manager
- Control Statements
- FIDEL
- PF Keys
- Cursor Control

**FOCUS: More Features of FIDEL****3 hours****FOCS19**

*FOCUS: More Features of FIDEL provides an overview of the additional features of FIDEL and how FIDEL is used with MODIFY and Dialogue Manager.*

- Course Conventions and Databases
- FIDEL in MODIFY
- Additional FIDEL Features
- FIDEL and CRTFORMs
- FIDEL in Dialogue Manager

**FOCUS: MAINTAIN Facility****4 hours****FOCS20**

*FOCUS: MAINTAIN Facility explains how to use the FOCUS MAINTAIN facility to maintain FOCUS files.*

- Course Overview
- Basic MAINTAIN Procedures
- Developing Screens
- The Winform Properties Dialog Box
- The Create Field Dialog Box
- Creating Buttons

**FOCUS: Completing a MAINTAIN Application****2 hours****FOCS21**

*FOCUS: Completing a MAINTAIN Application teaches users how to build cases, create a grid, and use other commands to complete an application in MAINTAIN.*

- Course Overview
- Developing Cases
- Case Codes
- Using a Grid
- Additional Command

# LANs Series

**Total Time: 6 hours**

<b>LANs: Network Basics</b>	<b>2 hours</b>	<b>LANC01</b>
<i>LANs: Network Basics introduces the user to fundamental LAN concepts.</i>		
<ul style="list-style-type: none"><li>• Introduction to LANs</li><li>• LAN Protocols</li><li>• The OSI Reference Model</li></ul>	<ul style="list-style-type: none"><li>• Popular Protocol Standards</li><li>• Topologies</li><li>• Access Methods</li></ul>	

<b>LANs: Hardware and Software</b>	<b>2 hours</b>	<b>LANC02</b>
<i>LANs: Hardware and Software explains the features and operation of the hardware and software needed for establishing and maintaining a LAN.</i>		
<ul style="list-style-type: none"><li>• Cabling</li><li>• Interface Cards</li><li>• Servers</li></ul>	<ul style="list-style-type: none"><li>• Network Wiring Hubs</li><li>• Wireless Networking</li><li>• Client/Server Computing</li></ul>	

<b>LANs: Internetworking</b>	<b>2 hours</b>	<b>LANC03</b>
<i>LANs: Internetworking describes some of the popular hardware and software that provide interoperability between different LANs or different applications.</i>		
<ul style="list-style-type: none"><li>• Network Operating Systems</li><li>• Printing</li><li>• Application and Database Servers</li></ul>	<ul style="list-style-type: none"><li>• Internetworking Products</li><li>• Bridges</li><li>• Routing Protocols</li></ul>	

# Linux LPIC 101 Series

**Total Time: 28 hours**

**Linux LPIC 101: Partitions and the Boot Process**

**3 hours**

**LPI101**

*Linux LPIC 101: Partitions and the Boot Process introduces users to the process of preparing a hard drive for use with the Linux operating system and explains the Linux boot process*

**Linux LPIC 101: File Management**

**3 hours**

**LPI102**

*Linux LPIC 101: File Management introduces users to the commands necessary to create, view, copy, move, and delete files on a Linux system.*

**Linux LPIC 101: GNU and Linux Commands**

**3 hours**

**LPI103**

*Linux LPIC 101: GNU and Linux Commands introduces users to shells and shows users how to configure user and environment variables and how to manage processes on a Linux system.*

**Linux LPIC 101: File System Maintenance**

**4 hours**

**LPI104**

*Linux LPIC 101: File System Maintenance shows users how to mount and unmount file systems, verify file system integrity, perform disk maintenance tasks, manage disk quotas, create links to files, and locate files.*

**Linux LPIC 101: Users and Groups**

**3 hours**

**LPI105**

*Linux LPIC 101: Users and Groups shows users how to create and manage user accounts and how to manage groups.*

**Linux LPIC 101: Text Streams**

**3 hours**

**LPI106**

*Linux LPIC 101: Text Streams shows users basic Linux commands for editing, filtering, and manipulating text.*

**Linux LPIC 101: Permissions**

**2 hours**

**LPI107**

*Linux LPIC 101: Permissions shows users how to manage user and group permissions for files and directories.*

**Linux LPIC 101: Administration and Documentation**

**4 hours**

**LPI108**

*Linux LPIC 101: Administration and Documentation shows users how to schedule jobs, manage system logging, and document their own Linux systems.*

**Linux LPIC 101: Backup and Restore**

**3 hours**

**LPI109**

*Linux LPIC 101: Backup and Restore introduces users to the process of planning a backup strategy and shows them how to create and restore a backup.*

## Network+ Series

**Total Time: 29 hours**

**Network+: Topology and Operating Systems**

**3 hours**

**NETP01**

*Network+: Topology and Operating Systems explains common physical and logical network topologies. This course also provides an overview of major operating systems, including Microsoft Windows NT, Novell Netware, and UNIX.*

**Network+: Network Media and Elements**

**3 hours**

**NETP02**

*Network+: Network Media and Elements explains the advantages of various network transmission media and the connectors used with these media. This course also explains the attributes and functions of common network elements.*

**Network+: OSI Reference Model and the Physical Layer**

**3 hours**

**NETP03**

*Network+: OSI Reference Model and the Physical Layer provides an overview of the OSI reference model of data communication networks. This course also explains devices that pertain to the physical layer.*

**Network+: Data Link Layer**

**2 hours**

**NETP04**

*Network+: Data Link Layer provides an overview of IEEE 802.x specifications. This course then discusses in depth the three most common specifications: 802.2, 802.3 and 802.5.*

**Network+: Understanding TCP/IP**

**3 hours**

**NETP05**

*Network+: Understanding TCP/IP explains concepts related to the Network and Transport layers of the OSI Reference model. This course then provides an overview of TCP/IP fundamentals.*

**Network+: TCP/IP Configuration and Utilities**

**4 hours**

**NETP06**

*Network+: TCP/IP Configuration and Utilities shows how to perform common TCP/IP administrative tasks.*

**Network+: Remote Connectivity**

**3 hours**

**NETP07**

*Network+: Remote Connectivity provides an overview of remote connectivity concepts and protocols, including PPP, SLIP, PPTP and ISDN, and shows the user how to install and configure a modem for dial-up networking.*

**Network+: Network Installation**

**3 hours**

**NETP08**

*Network+: Network Installation explains how to plan, implement and document an effective network installation.*

**Network+: Security, Maintenance and Support**

**3 hours**

**NETP09**

*Network+: Security, Maintenance and Support provides an overview of good network security practices. This course also shows users how to obtain and implement software patches and upgrades, and discusses backup and antivirus procedures.*

**Network+: Troubleshooting**

**2 hours**

**NETP10**

*Network+: Troubleshooting shows users how to take a systematic approach to troubleshooting network problems.*

# Networking for Technical Users Series

**Total Time: 4 hours**

## **Networking: Technical Information**

**2 hours**

**NETW02**

*Networking: Technical Information provides an overview about the concepts related to a networking computers.*

- Data Communication
- Data Storage And Transmission
- The Telephone Line
- Transmission Errors
- Error Checking

## **Networking: Hardware and Software**

**2 hours**

**NETW03**

*Networking: Hardware and Software provides an overview of the use of the hardware components of a data communication system.*

- System Hardware Components
- Host Computer Hardware
- Transmission-Associated Hardware
- Systems Network Architecture
- Software Components

# Notes 5 Programming Series

**Total Time: 22 hours**

## **Notes 5 Programming: Designing in Domino**

**4 hours**

**N5PR01**

*Notes 5 Programming: Designing in Domino provides an overview of the Domino Designer interface and an introduction to Notes databases.*

- The Domino Designer
- Adding Databases to Your Application
- Database Copies, Replicas, and Security
- Working with Database Designs

## **Notes 5 Programming: Pages and Forms**

**4 hours**

**N5PR02**

*Notes 5 Programming: Pages and Forms explains how to create high quality, Web-ready pages and forms.*

- Creating Pages
- Including Graphics
- Working with Tables
- Adding Forms
- Form Actions and Subforms

## **Notes 5 Programming: Organizing Info**

**4 hours**

**N5PR03**

*Notes 5 Programming: Organizing Info shows how to use the tools that make information easy to find and easy to use.*

- Developing Views
- Programming Views
- Using Outlines
- Creating Frames
- Adding Navigators
- Working with Hotspots

**Notes 5 Programming: Scripting**

**3 hours**

**N5PR04**

*Notes 5 Programming: Scripting introduces using scripts in applications and working with the Domino Object Model.*

- Formula Language
- Keywords and @functions
- Adding Scripts to Your Application
- Objects and Events
- Programming Events

**Notes 5 Programming: LotusScript**

**4 hours**

**N5PR05**

*Notes 5 Programming: LotusScript explains the tools needed to create agents and scripts in LotusScript.*

- Working with Variables
- User-Defined Types and Classes
- Loops and Conditionals
- LotusScript Procedures
- LotusScript and Front-End Classes

**Notes 5 Programming: Java**

**3 hours**

**N5PR06**

*Notes 5 Programming: Java explains how Lotus handles Java and gives an overview on using Java for agents, applets, servlets, and standalone applications.*

- Java in Domino
- Java Agents and Applets
- Java Applications and Servlets
- Java and DOM Classes

# Novell 560 CNE Series

**Total Time: 30 hours**

## **Novell 560 CNE: NetWare Basics**

**4 hours**

**560C01**

*Novell 560 CNE: NetWare Basics introduces networking concepts and the role of NetWare 5. It also covers the procedures for installing the Novell Client and logging in to the NetWare 5 network.*

- Networking and NetWare
- Novell Directory Services
- NDS and Resource Access
- Network Communications
- Selecting a Protocol
- The Novell Client

## **Novell 560 CNE: Installation**

**4 hours**

**560C02**

*Novell 560 CNE: Installation provides instructions on how to perform a basic and custom installation of NetWare 5 on a new computer.*

- Preparing to Install NetWare 5
- Creating a DOS Partition
- Creating the NetWare Partition
- Protocols, NDS, and Licenses
- Completing the Installation
- NetWare Architecture and Management
- Novell Licensing Services

## **Novell 560 CNE: Using NDS**

**3 hours**

**560C03**

*Novell 560 CNE: Using NDS examines Novell Directory Services (NDS), including objects and object properties. This course shows users how to use the CX command to find NDS objects and set user context. It also shows users how to create User, Alias, and Group objects.*

- Browsing the NDS Tree
- Creating User Objects
- Login Security
- ConsoleOne and UIMPORT
- Shortcuts to Network Resources

## **Novell 560 CNE: File System**

**4 hours**

**560C04**

*Novell 560 CNE: File System provides an introduction to NetWare 5 file system concepts and management procedures.*

- Managing the File System
- Volume Space
- Examining Login Scripts
- Creating and Executing Login Scripts
- Drive Mappings
- Login Scripts and Resources

**Novell 560 CNE: NDS Security****3 hours****560C05**

*Novell 560 CNE: NDS Security shows users how to control access to NDS objects by granting users rights and managing those rights.*

- Controlling Access to Objects
- Inherited and Effective Rights in NDS
- Assigning NDS Rights
- Security Problems
- User Context and Resource Access

**Novell 560 CNE: File Security****2 hours****560C06**

*Novell 560 CNE: File Security provides an introduction to NetWare 5 file system security measures and procedures for setting file access rights.*

- Examining File System Security
- Setting Directory and File Security
- Planning File System Rights
- Examining Attribute Security

**Novell 560 CNE: ZENworks****3 hours****560C07**

*Novell 560 CNE: ZENworks shows users how to distribute and manage applications over a NetWare 5 network by using ZENworks and Novell Application Launcher (NAL).*

- Zero Effort Networks
- Novell Application Launcher (NAL)
- Distributing Applications
- Managing Applications with NAL

**Novell 560 CNE: Advanced ZENworks****4 hours****560C08**

*Novell 560 CNE: Advanced ZENworks shows users how to manage workstation environments by using various types of policy packages. The course also explains how to enable remote control workstation access and Help Requester.*

- Policy Packages
- Workstations and NDS
- Policies and the Desktop Environments
- Remote Control Access to Workstations
- Help Requester

**Novell 560 CNE: Distributed Printing****3 hours****560C09**

*Novell 560 CNE: Distributed Printing shows users how to set up Novell Distributed Printing Services (NDPS) on a NetWare 5 network.*

- Novell Distributed Printing Services
- Working with NDPS
- Managing Workstation Printing and NDPS

# Novell 570 CNE Advanced Administration Series

**Total Time: 19 hours**

**Novell 570 CNE Advanced Administration: Upgrading or Migrating** **2 hours** **570C01**

*Novell 570 CNE Advanced Administration: Upgrading or Migrating reviews the procedures for upgrading an existing NetWare server to NetWare 5 or migrating the information on an existing NetWare server to a new NetWare 5 server.*

- Upgrading
- Migrating
- Preparing the Source and the Project
- Selecting and Verifying Data
- Completing the Migration

**Novell 570 CNE Advanced Administration: Managing the Server** **3 hours** **570C02**

*Novell 570 CNE Advanced Administration: Managing the Server provides instructions on how to manage a NetWare 5 server by using NLMs, configuration files, and ConsoleOne. The course also examines how to secure the server and enable Java support.*

- Server Components and Functions
- Server Configuration Files
- Remote Console
- Securing the Server
- Java Support
- Managing with ConsoleOne

**Novell 570 CNE Advanced Administration: The File System** **4 hours** **570C03**

*Novell 570 CNE Advanced Administration: The File System reviews the role of volumes and directories in the file system, including principles for structuring the file system. It also provides instruction on how to create custom volumes and directories.*

- Examining the File System
- Managing Volumes
- Mirroring and Duplexing
- System Created Directories
- Custom Directory Structures

**Novell 570 CNE Advanced Administration: NSS and Backup**

**4 hours**

**570C04**

*Novell 570 CNE Advanced Administration: NSS and Backup examines how information on the NetWare 5 server can be stored in a Novell Storage System volume. It also examines the concepts and procedures for backing up and restoring both server and workstation data.*

- Novell Storage System (NSS)
- NSS Volumes
- Understanding Backup
- Preparing for Backup
- Backing Up Data
- Data Restoration

**Novell 570 CNE Advanced Administration: Memory and CPU Performance**

**3 hours**

**570C05**

*Novell 570 CNE Advanced Administration: Memory and CPU Performance shows users how to optimise server performance by using the MONITOR application and managing server memory.*

- NetWare 5 Memory Allocation
- Virtual Memory
- Monitoring Server Performance
- Configuring Cache
- Optimising CPU Utilization

**Novell 570 CNE Advanced Administration: Disk and Network Performance**

**3 hours**

**570C06**

*Novell 570 CNE Advanced Administration: Disk and Network Performance shows the user advanced techniques for optimising the server. These techniques increase the amount of data that can be stored on the server and the speed at which server communications occur.*

- Block Sub allocation
- File Compression
- Packet Receive Buffers
- Large Internet Packets (LIPs)
- Packet Burst Protocol

# Object-Oriented Analysis & Design Series

**Total Time: 8 hours**

## ***Object-Oriented Analysis & Design: Intro***

**4 hours**

**OADC01**

*Object-Oriented Analysis & Design: Intro provides an overview of object orientation and its development process.*

- Advantages of Using Object Orientation
- Concepts for Object Orientation
- Components of Object Orientation
- The Development Process
- Object Relationships
- Object Hierarchies

## ***Object-Oriented Analysis & Design: System***

**4 hours**

**OADC02**

*Object-Oriented Analysis & Design: System explains the creation of object-oriented design and analysis systems.*

- Analysis and Design of a Sample System
- The Structure and Subject Layers
- The Attribute Layer
- The Service Layer
- Object-Oriented Design
- The Problem Domain Component
- The Human Interaction Component
- The Data Management Component

# OOP Using C++ Series

**Total Time: 24 hours**

## **OOP Using C++: Week 1**

**10 hours**

**CPPC01**

*OOP Using C++: Week 1 begins with a basic explanation of C++ components and quickly progresses to writing real object-oriented programs. Sample listings, complete with sample output and an analysis of code, illustrate the topics of the day.*

- Day 1: Getting Started
- Day 2: The Parts of a C++ Program
- Day 3: Variables and Constants
- Day 4: Expressions and Statements
- Day 5: Functions
- Day 6: Basic Classes
- Day 7: More Program Flow
- Week 1 in Review

## **OOP Using C++: Week 2**

**10 hours**

**CPPC02**

*OOP Using C++: Week 2 begins with how pointers and references work and then moves on to the advanced use of functions. It also presents arrays and collections, explores inheritance and polymorphism and ends with a discussion of special classes and friends. Sample listings, complete with sample output and an analysis of code, illustrate the topics of the day.*

- Day 8: Pointers
- Day 9: References
- Day 10: Advanced Functions
- Day 11: Arrays
- Day 12: Inheritance
- Day 13: Polymorphism
- Day 14: Special Classes and Functions
- Week 2 in Review

## **OOP Using C++: Week 3**

**4 hours**

**CPPC03**

*OOP Using C++: Week 3 begins with a discussion of advanced inheritance and then moves on to cover streams in depth. It also presents advanced tricks of the pre-processor, discusses object-oriented analysis and design, and introduces templates. Week 3 ends with an explanation of exceptions, standard libraries, and bit manipulation. Sample listings, complete with sample output and an analysis of code, illustrate the topics of the day.*

- Day 15: Advanced Inheritance
- Day 16: Streams
- Day 17: The Pre-processor
- Day 18: Object-Oriented Analysis and Design
- Day 19: Templates
- Day 20: Exceptions and Error Handling
- Day 21: What's Next
- Week 3 in Review

# Oracle Series

**Total Time: 26 hours**

## Recommended Prerequisite

A basic understanding of how to retrieve information from relational databases using SQL.

### **Oracle: Introduction to PL/SQL**

**4 hours**

**PLSC01**

*Oracle: Introduction to PL/SQL provides an introduction to the PL/SQL, Oracle's procedural language extension to SQL.*

- PL/SQL
- PL/SQL Structures
- Packages
- Triggers
- Stored Procedures

### **Oracle: Overview of Developer/2000**

**3 hours**

**ORDC01**

*Oracle: Overview of Developer/2000 presents the common features shared by the suite of tools in Oracle Developer/2000. These tools include Oracle Forms 4.5, Oracle Reports 2.5, Oracle Graphics 2.5, and Oracle Procedure Builder 1.5.*

- Introducing Oracle Applications
- The Windows Interface
- The Object Navigators
- Setting Object Properties
- Introducing the Layout Editors
- Working with Objects in the Layout Editor
- Introducing the PL/SQL Editors
- Getting Help
- Object Orientation and OLE2

### **Oracle: Forms 4.5 and Reports 2.5**

**4 hours**

**ORDC02**

*Oracle: Forms 4.5 and Reports 2.5 provides an overview of Oracle Forms 4.5 and Oracle Reports 2.5.*

- Overview of Oracle Forms
- Introducing Forms Designer
- The Layout Editor
- The PL/SQL and Menu Editors
- Creating Forms Objects and Libraries
- Overview of Oracle Reports
- Introducing Reports Designer
- The Reports Designer Editors
- Displaying Report-Style Formats

**Oracle: Graphics 2.5 and Procedure Builder 1.5**

**4 hours**

**ORDC03**

*Oracle: Graphics 2.5 and Procedure Builder 1.5 provides an overview of Oracle Graphics 2.5 and Oracle Procedure Builder 1.5.*

- Overview of Oracle Graphics
- Introducing Graphics Designer
- The Layout Editor
- The Chart Template and Program Unit Editors
- Displaying Chart Types
- Overview of Procedure Builder
- Introducing Procedure Builder
- The Procedure Builder Editors
- Debugging PL/SQL Program Units

**Oracle: Developer/2000 Applications**

**4 hours**

**ORDC04**

*Oracle: Developer/2000 Applications explores the development of applications using Oracle Forms and Oracle Reports.*

- Developing Oracle Forms Applications
- Developing Oracle Reports Applications

**Oracle: Developer/2000 Integration**

**4 hours**

**ORDC05**

*Oracle: Developer/2000 Integration explores the incorporation of Oracle Graphics displays into an application and the integration of Oracle Forms, Oracle Reports, Oracle Graphics, and Oracle Procedure Builder applications through a single point of entry for the user.*

- Developing Oracle Graphics Applications
- Integration and Deployment in the Windows Environment

# Oracle8 Series

**Total Time: 42 hours**

<p><b>Oracle8: Installing Oracle</b></p> <p><i>Oracle8: Installing Oracle introduces users to Oracle administration and shows how to install Oracle8.</i></p> <ul style="list-style-type: none"><li>• Introduction to Oracle Administration</li><li>• How Oracle Operates</li><li>• Oracle Performance</li></ul>	<p><b>6 hours</b></p>	<p><b>ORCC01</b></p>
<p><b>Oracle8: Database Management</b></p> <p><i>Oracle8: Database Management shows users how to manage the Oracle8 databases and servers.</i></p> <ul style="list-style-type: none"><li>• Planning for Capacity and Sizing</li><li>• Calculating the System Requirements</li><li>• Calculating the Disk Requirements</li><li>• Managing the Database</li></ul>	<p><b>6 hours</b></p>	<p><b>ORCC02</b></p>
<p><b>Oracle8: Building Databases</b></p> <p><i>Oracle8: Building Databases shows users how to create and set up new Oracle databases.</i></p> <ul style="list-style-type: none"><li>• Database Planning and Design</li><li>• Creating a New Database and Catalogues</li><li>• Modifying Databases</li></ul>	<p><b>6 hours</b></p>	<p><b>ORCC03</b></p>
<p><b>Oracle8: Files, Data, and Users</b></p> <p><i>Oracle8: Files, Data, and Users shows users how to manage files, import and export data, and manage user accounts.</i></p> <ul style="list-style-type: none"><li>• Redo Log Files</li><li>• Control Files and Rollback Segments</li><li>• Managing Rollback Segments</li><li>• Creating User Accounts</li></ul>	<p><b>6 hours</b></p>	<p><b>ORCC04</b></p>

**Oracle8: Database Schema Objects**

**6 hours**

**ORCC05**

*Oracle8: Database Schema Objects shows users how to manage tables and indexes.*

- Understanding Tables
- Creating Tables
- Special Tables and Table Views
- Indexes
- Creating Indexes
- Special Indexes
- Synonyms and Table Sequences

**Oracle8: Processes and Security**

**6 hours**

**ORCC06**

*Oracle8: Processes and Security explains server processes to students and how to use Oracle security features.*

- Understanding Processes
- The Parallel Query Option
- Monitoring Processes
- Managing Job Queues
- Using Oracle Auditing

**Oracle8: Backup and Recovery**

**6 hours**

**ORCC07**

*Oracle8: Backup and Recovery shows students how to protect Oracle database data by creating and using backups.*

- Oracle Backups
- Configuring Disks for Protection
- Backup and Recovery strategies
- Backing Up the Database
- Recovering the Database
- Replicating Databases
- Configuring Replication
- Other Replication Options

## Oracle9i Database Fundamentals 1Z1-031 Series

**Total Time: 31 hours**

**Oracle9i Database Fundamentals 1Z1-031: Oracle Architecture and Tools 3 hours OR3101**

*Oracle9i Database Fundamentals 1Z1-031: Oracle Architecture and Tools introduces users to the major components of an Oracle server.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Instances and Creating Databases 3 hours OR3102**

*Oracle9i Database Fundamentals 1Z1-031: Managing Instances and Creating Databases introduces users to managing an Oracle instance, creating a database, and using globalization parameters.*

**Oracle9i Database Fundamentals 1Z1-031: Managing the Database Structure 3 hours OR3103**

*Oracle9i Database Fundamentals 1Z1-031: Managing the Database Structure introduces users to data dictionaries, control files, and redo log files.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Tablespaces and Datafiles 2 hours OR3104**

*Oracle9i Database Fundamentals 1Z1-031: Managing Tablespaces and Datafiles introduces users to creating and managing tablespaces.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Storage Structures and Undo Data 4 hours OR3105**

*Oracle9i Database Fundamentals 1Z1-031: Managing Storage Structures and Undo Data introduces users to the underlying storage structure of a database and to using undo segments.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Tables** **4 hours** **OR3106**

*Oracle9i Database Fundamentals 1Z1-031: Managing Tables introduces users to creating and managing table structures.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Indexes and Data Integrity** **3 hours** **OR3107**

*Oracle9i Database Fundamentals 1Z1-031: Managing Indexes and Data Integrity introduces users to indexes and data integrity constraints.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Users and Profiles** **3 hours** **OR3108**

*Oracle9i Database Fundamentals 1Z1-031: Managing Users and Profiles introduces users to creating and managing users and to control resources using profiles.*

**Oracle9i Database Fundamentals 1Z1-031: Managing Privileges and Roles** **3 hours** **OR3109**

*Oracle9i Database Fundamentals 1Z1-031: Managing Privileges and Roles introduces users to system and object privileges and user roles.*

**Oracle9i Database Fundamentals 1Z1-031: Exam Preparation** **3 hours** **OR3110**

*Oracle9i Database Fundamentals 1Z1-031: Exam Preparation allows users to practice answering questions in order to prepare for taking the exam.*

# Power Builder 5 Series

**Total Time: 35 hours**

<b>Power Builder 5: Power Builder 5 Overview</b>	<b>3 hours</b>	<b>PB5TC1</b>
<i>Power Builder 5 Overview introduces using Power Builder 5 with the Windows 95 operating system and establishes a foundation of knowledge from which the rest of the Power Builder courses can build.</i>		
<ul style="list-style-type: none"><li>• Introducing Power Builder</li><li>• Using Power Builder Libraries</li><li>• Using Power Builder Application Painter and Applications</li><li>• Using Menu Options in Power Builder Painters</li></ul>	<ul style="list-style-type: none"><li>• Using Menus</li><li>• Using Windows</li><li>• Pulling It Together with Power Script and Events</li><li>• Using Databases, Toolbars, and Online Help</li></ul>	

<b>Power Builder 5: Getting Started with Power Builder 5</b>	<b>8 hours</b>	<b>PB5TC2</b>
<i>Getting Started with Power Builder 5 takes a comprehensive look at application development using Power Builder 5. Users learn first-hand how to analyse, design and implement a simple Power Builder application</i>		
<ul style="list-style-type: none"><li>• Understanding Analysis and Design</li><li>• Designing a System with the Database Painter</li><li>• Using the Application Painter</li></ul>	<ul style="list-style-type: none"><li>• Exploring Windows</li><li>• Designing Menus</li></ul>	

<b>Power Builder 5: Using Power Script</b>	<b>8 hours</b>	<b>PB5TC3</b>
<i>Using Power Script explains some of the more powerful features of Power Builder. Users expand their programming skills while learning how to program in Power Script and how to use SQL in Power Builder 5.</i>		
<ul style="list-style-type: none"><li>• Using Events, Functions, and the Power Script Language</li><li>• Programming in Power Script</li></ul>	<ul style="list-style-type: none"><li>• Using SQL in Power Builder</li></ul>	

**Power Builder 5: Using DataWindows**

**8 hours**

**PB5TC4**

*Using DataWindows covers one of Power Builder's strongest features: DataWindows. It describes several DataWindows development techniques and how to associate DataWindows with an application. The course also explains how to generate reports.*

- Creating DataWindows
- Enhancing DataWindows
- Manipulating Data Using DataWindows
- Creating Reports

**Power Builder 5: Delivering the Final Product**

**8 hours**

**PB5TC5**

*Delivering the Final Product covers how to manage Power Builder libraries, debug applications, and deliver an executable.*

- Power Builder Libraries
- Pulling It All Together in an Application
- Debugging Your Applications
- Delivering an Executable

# Power Builder 6 Series

**Total Time: 60 hours**

<p><b>Power Builder 6: Introducing Power Builder</b> <span style="float: right;"><b>6 hours</b> <b>P6BC01</b></span></p> <p><i>Power Builder 6: Introducing Power Builder provides an introduction to Power Builder and its development environment.</i></p> <ul style="list-style-type: none"><li>• Installing Power Builder and Libraries</li><li>• Application Painter and Property Sheets</li><li>• Creating Menus</li><li>• Creating Windows</li><li>• Responding to Events with Power Script</li><li>• Running Your Application</li></ul>
<p><b>Power Builder 6: Design Concepts</b> <span style="float: right;"><b>6 hours</b> <b>P6BC02</b></span></p> <p><i>Power Builder 6: Design Concepts provides an introduction to Power Builder design and object-oriented development.</i></p> <ul style="list-style-type: none"><li>• Analysing the Requirements</li><li>• Creating a Logical Data Model</li><li>• Creating a Data Model Database</li><li>• Creating Database Tables</li><li>• Using Database Tables</li><li>• Using Table Data</li><li>• Understanding Object Orientation</li><li>• Features of Object Oriented Software</li></ul>
<p><b>Power Builder 6: Building Objects</b> <span style="float: right;"><b>6 hours</b> <b>P6BC03</b></span></p> <p><i>Power Builder 6: Building Objects begins showing the user the basic building blocks for developing Power Builder applications.</i></p> <ul style="list-style-type: none"><li>• Using the Application Painter</li><li>• Using the Library Painter</li><li>• Using Libraries</li><li>• Managing Libraries</li><li>• Creating Menus</li><li>• Attaching Menus and Toolbars</li></ul>
<p><b>Power Builder 6: Building Windows</b> <span style="float: right;"><b>6 hours</b> <b>P6BC04</b></span></p> <p><i>Power Builder 6: Building Windows shows users how to create and manage windows in a Power Builder application.</i></p> <ul style="list-style-type: none"><li>• Setting Window Properties</li><li>• Setting Windows 95 Controls</li><li>• Window Properties, Buttons, and Pictures</li><li>• User Input on Windows</li><li>• Controlling Window Appearance</li><li>• Adding Elements to Windows</li><li>• Using Advanced Window Features</li><li>• Window Sheets</li></ul>
<p><b>Power Builder 6: Event Programming</b> <span style="float: right;"><b>6 hours</b> <b>P6BC05</b></span></p> <p><i>Power Builder 6: Event Programming shows users how to respond to events in an application and use variables with Power Script.</i></p> <ul style="list-style-type: none"><li>• Responding to Events</li><li>• Scripting with Variables</li><li>• Declaring Variables</li><li>• Array, Class, and Reference Variables</li><li>• Using Operators</li><li>• Power Script Statements</li><li>• Using the Script Painter</li></ul>

**Power Builder 6: Power Script and SQL****6 hours****P6BC06**

*Power Builder 6: Power Script and SQL shows users how to use SQL commands to interact with databases in Power Builder applications.*

- Understanding Database Transactions
- Creating Functions
- Using DataWindow Objects
- Scripting for Specific Events
- Using Arguments and DataWindow Events
- Scripting for Treeviews
- Understanding SQL Syntax
- SQL Commands, Painter, and Cursors

**Power Builder 6: Creating DataWindows****6 hours****P6BC07**

*Power Builder 6: Creating DataWindows shows users how to create and control DataWindows in their Power Builder applications.*

- Using the DataWindow Painter
- Data Sources and Layout
- Creating Freeform DataWindows
- More DataWindows
- Using Other Data Sources
- DataWindow Controls

**Power Builder 6: Using DataWindows****6 hours****P6BC08**

*Power Builder 6: Using DataWindows shows users how to manipulate and display data and data sources using DataWindows.*

- Using Edit Styles
- EditMasks and Drop-Down DataWindows
- Display Formats and Validation
- Customizing DataWindows
- Column Defaults and Conditionals
- Displaying Data and Data Sources
- Modifying the Data Source
- Manipulating Data
- Accessing DataWindow Columns

**Power Builder 6: Reviewing an Application****6 hours****P6BC09**

*Power Builder 6: Reviewing an Application shows users how to provide reports and final touches on a Power Builder application.*

- The Report Painter
- Creating Grouped Reports
- Modifying Grouped Reports
- Creating Graphs
- Creating Label Reports
- Nested Reports and Crosstabs
- Adding the Final Touches
- Creating Windows within Windows
- Checking the Finished Product

**Power Builder 6: The Final Product****6 hours****P6BC10**

*Power Builder 6: The Final Product shows users how to debug a Power Builder application and create an executable program.*

- The Debug Window
- Modifying the Debug Window
- Understanding the Source Views
- Using and Setting Breakpoints
- Examining the State of an Application
- Debugging the Application
- Building the Executable
- Creating Deployment Files

# RPG IV Programming Series

**Total Time: 38 hours**

## **RPG IV Programming: Introduction to RPG**

**3 hours**

**RPGI01**

*RPG IV Programming: Introduction to RPG provides an overview of the RPG programming language and general programming concepts needed to begin learning to program in RPG IV.*

- History of RPG
- Variables and Data
- Programming
- Beginning Program Entry
- Completing Program Entry and Testing

## **RPG IV Programming: Getting Started with RPG**

**3 hours**

**RPGI02**

*RPG IV Programming: Getting Started with RPG shows users how to write simple programs in RPG IV.*

- Program File Specifications
- Program Input Specifications
- Program Output Specifications
- Program Calculation Specifications
- RPG IV Output Editing

## **RPG IV Programming: Defining Data**

**2 hours**

**RPGI03**

*RPG IV Programming: Defining Data shows users how to define work fields, data structures, and other data items in RPG IV programs.*

- Definition Specifications
- Data Types and Constants
- Data Structures

## **RPG IV Programming: Arithmetic Operations**

**3 hours**

**RPGI04**

*RPG IV Programming: Arithmetic Operations shows users how to perform arithmetic calculations in RPG IV programs.*

- Numbers and Arithmetic
- Defining Field Sizes
- Example Program
- Assignment and Conversion
- Functions, Operations, and Indicators

**RPG IV Programming: Flow of Control****3 hours****RPGI05**

*RPG IV Programming: Flow of Control shows users how to write programs in RPG IV using top-down, structured design.*

- Structured Program Design
- SELECT and Iteration
- Early Exits and Subroutines
- Creating a Report with Subtotals

**RPG IV Programming: Externally Described Files****3 hours****RPGI06**

*RPG IV Programming: Externally Described Files shows users how to write programs in RPG IV to access AS/400 database files.*

- Physical Files
- Logical Files
- Creating and Using Database Files
- Printer Files

**RPG IV Programming: File Access and Record Manipulation****3 hours****RPGI07**

*RPG IV Programming: File Access and Record Manipulation shows users how to read, write, and update records in RPG IV programs.*

- Sequential Input Access
- Random Input Access
- Output Access
- Handling I/O Errors

**RPG IV Programming: Interactive Applications****4 hours****RPGI08**

*RPG IV Programming: Interactive Applications shows users how to define display files and how to use them to develop interactive applications.*

- Display Files
- DDS Keywords
- Data Validation and Indicators
- File Maintenance

**RPG IV Programming: Tables and Arrays****3 hours****RPGI09**

*RPG IV Programming: Tables and Arrays shows users how to create, store, and access tables, and how to define and use arrays.*

- Using Tables
- Using Related Tables
- Defining Arrays
- Accessing Array Data

**RPG IV Programming: Modular Programming**

**3 hours**

**RPGI10**

*RPG IV Programming: Modular Programming shows users how RPG IV programs can communicate with one another by passing data values.*

- Introduction to Modular Programming
- Data and Procedures
- Prototypes and APIs
- Data Areas

**RPG IV Programming: Advanced Data Definition**

**4 hours**

**RPGI11**

*RPG IV Programming: Advanced Data Definition shows users how to use a number of advanced RPG IV features to define data in ways that facilitate data manipulation.*

- Data Types
- LIKE and Data Structures
- More Data Structures
- Field Inspection
- Character Field Inspection
- Character Field Manipulation

**RPG IV Programming: Advanced Techniques**

**2 hours**

**RPGI12**

*RPG IV Programming: Advanced Techniques shows users how to write RPG IV programs that use sub files and online help.*

- Interactive Programs
- Loading the Sub file a Page at a Time
- Using Sub files

**RPG IV Programming: Maintaining the Past**

**2 hours**

**RPGI13**

*RPG IV Programming: Maintaining the Past shows users how to recognize features and operations used extensively in earlier versions of RPG that are now considered obsolete but still supported.*

- RPG III Differences
- More RPG III Differences
- RPG II Initial Look
- RPG II Differences
- More RPG II Differences

# SAS Series

**Total Time: 38 hours**

## **SAS: Introduction**

**3 hours**

**SAS601**

*SAS: Introduction provides a preview of the SAS System and describes some of its software features and components. It also covers basic data concepts and the structure of the SAS programming language.*

- SAS Preview
- Data Basics
- SAS Language

## **SAS: Using SAS**

**4 hours**

**SAS602**

*SAS: Using SAS discusses the basic statements used when coding SAS programs and explains how to use the SAS log to troubleshoot coding errors. It also presents the different modes for executing SAS.*

- Using SAS Statements
- Analysing SAS Logs
- Executing the SAS System

## **SAS: Data Manipulation**

**4 hours**

**SAS603**

*SAS: Data Manipulation covers optional SAS statements used to modify data so that more complex data analysis tasks can be performed.*

- Reviewing the Course Program
- Using Variables
- Using Expressions
- Working with Dates
- Working with Observations
- Analysing SAS Logs

## **SAS: DATA Step Programming**

**3 hours**

**SAS604**

*SAS: DATA Step Programming describes statements and options available to program various features in the DATA step.*

- Working with Sorted Data
- Accumulating Totals
- Writing Output
- Analysing SAS Logs

## **SAS: Results**

**5 hours**

**SAS605**

*SAS: Results describes SAS procedures used to create more informative and specialized output as well as some basic statistical procedures.*

- Printing Basic Output
- Simple SAS Statistics
- PROC REPORT
- Analysing SAS Logs

**SAS: Display Manager System****5 hours****SAS606**

*SAS: Display Manager System explains how to use Display Manager, a full-screen facility that allows you to create and run SAS jobs interactively.*

- What is Display Manager?
- Managing the Windowing Environment
- Using Display Manager Windows
- Using the SAS Text Editor
- Managing SAS Files

**SAS: Data Libraries****5 hours****SAS607**

*SAS: Data Libraries explains the model that SAS uses to store and access data in SAS files. It shows how to use SAS procedures and Display Manager windows to manage SAS data libraries and their members.*

- Data Library Model
- SAS Data Sets
- Getting Information
- Modifying Data Library Files
- Managing Data Library Members

**SAS: Inputting Data and PROC SQL****4 hours****SAS608**

*SAS: Inputting Data and PROC SQL describes ways to create and manipulate SAS data sets, including an introduction to using the SQL procedure in SAS.*

- Input Styles
- Reading External Files
- Introduction to SQL
- Using PROC SQL

**SAS: Combining and Updating Data Sets****5 hours****SAS609**

*SAS: Combining and Updating Data Sets presents various methods for combining and updating existing SAS data sets.*

- Concatenating Data Sets
- Interleaving and Merging Data Sets
- Updating with UPDATE
- Updating with MODIFY
- Using Other Techniques

## SAS 8 Series

**Total Time: 37 hours**

### **SAS 8: Introduction**

**3 hours**

**SASS01**

*SAS 8: Introduction provides a preview of the SAS System and describes some of its software features and components. It also covers basic data concepts and the structure of the SAS programming language.*

- SAS Preview
- Data Basics
- SAS Language

### **SAS 8: Using SAS**

**4 hours**

**SASS02**

*SAS 8: Using SAS discusses the basic statements used when coding SAS programs and explains how to use the SAS log to troubleshoot coding errors. It also presents the different modes for executing SAS.*

- Using SAS Statements
- Analysing SAS Logs
- Executing the SAS System

### **SAS 8: Data Manipulation**

**4 hours**

**SASS03**

*SAS 8: Data Manipulation covers optional SAS statements used to modify data so that more complex data analysis tasks can be performed.*

- Reviewing the Course Program
- Using Variables
- Using Expressions
- Working with Dates
- Working with Observations
- Analysing SAS Logs

### **SAS 8: DATA Step Programming**

**3 hours**

**SASS04**

*SAS 8: DATA Step Programming describes statements and options available to program various features in the DATA step.*

- Working with Sorted Data
- Accumulating Totals
- Writing Output
- Analysing SAS Logs

**SAS 8: Results****5 hours****SASS05**

*SAS 8: Results describes SAS procedures used to create more informative and specialized output as well as some basic statistical procedures.*

- Printing Basic Output
- Simple SAS Statistics
- PROC REPORT
- Analysing SAS Logs

**SAS 8: Display Manager System****4 hours****SASS06**

*SAS 8: Display Manager System explains how to use Display Manager, a full-screen facility that allows you to create and run SAS jobs interactively.*

- Understanding Display Manager
- Managing the Windowing Environment
- Using Display Manager Windows
- Using the SAS Text Editor
- Managing SAS Files

**SAS 8: Data Libraries****5 hours****SASS07**

*SAS 8: Data Libraries explains the model that SAS uses to store and access data in SAS files. It shows how to use SAS procedures and Display Manager windows to manage SAS data libraries and their members.*

- Data Library Model
- SAS Data Sets
- Getting Information
- Modifying Data Library Files
- Managing Data Library Members

**SAS 8: Inputting Data and PROC SQL****4 hours****SASS08**

*SAS 8: Inputting Data and PROC SQL describes ways to create and manipulate SAS data sets, including an introduction to using the SQL procedure in SAS.*

- Input Styles
- Reading External Files
- Introduction to SQL
- Using PROC SQL

**SAS 8: Combining and Updating Data Sets****5 hours****SASS09**

*SAS 8: Combining and Updating Data Sets presents various methods for combining and updating existing SAS data sets.*

- Concatenating Data Sets
- Interleaving and Merging Data Sets
- Updating with UPDATE
- Updating with MODIFY
- Using Other Techniques

## Solaris 8 System Administrator 310-011 Series

**Total Time: 16 hours**

**Solaris 8 System Administrator 310-011: Installation, Initialization, and Shutdown**      **3 hours**      **SLR801**

*Solaris 8 System Administrator 310-011: Installation, Initialization, and Shutdown provides an introduction to Solaris system administration terms and commands. It describes the various system configurations and the installation of the Solaris operating system on a workstation. It also provides an overview of the hardware and the operating system functions required to bring the system to a running state, and the steps required to properly shut down the system.*

**Solaris 8 System Administrator 310-011: The Boot Process and Boot PROM**      **3 hours**      **SLR802**

*Solaris 8 System Administrator 310-011: The Boot Process and Boot PROM provides a general overview of the startup process, presents an introduction to OpenBoot, and gives specifics on /sbin/init, run levels, and run control scripts. Specific details on the OpenBoot firmware and kernel loading are also included.*

**Solaris 8 System Administrator 310-011: User and Software Package Administration**      **3 hours**      **SLR803**

*Solaris 8 System Administrator 310-011: User and Software Package Administration explains the use of user and group login accounts, and shows how to add and remove additional applications after the operating system has already been installed.*

**Solaris 8 System Administrator 310-011: System Security and Remote Connection**      **4 hours**      **SLR804**

*Solaris 8 System Administrator 310-011: System Security and Remote Connection shows how to protect data against loss due to a disaster, system failure, or intrusion. Topics include permissions, access control lists, auditing, network security, and controlling remote access to the system.*

**Solaris 8 System Administrator 310-011: Process Control**      **3 hours**      **SLR805**

*Solaris 8 System Administrator 310-011: Process Control provides an introduction to Solaris processes, and shows how to view processes, understand the effects signals have on processes, and manage processes.*

# Sybase Series

**Total Time: 28 hours**

## **Sybase: Introduction to Sybase**

**4 hours**

**SYBC01**

*Sybase: Introduction to Sybase provides an overview to Sybase SQL Server, the client/server system model, and the tools and components of Sybase System 11.*

- Host versus Client/Server Systems
- Sybase Introduction
- SQL Server, Data Replication, and Open Architecture
- System Management Tools and Servers

## **Sybase: Using SQL Server**

**4 hours**

**SYBC02**

*Sybase: Using SQL Server introduces users to SQL Server and how to use it to create, manage, and access database information.*

- SQL Server Overview
- SQL Server Functions
- SQL Server Features
- T-SQL and Database Integrity
- Triggers, Partitions, and Security
- Using isql and Performing Queries
- Viewing, Managing, and Creating Tables
- Maintaining Databases

## **Sybase: System Administration**

**4 hours**

**SYBC03**

*Sybase: System Administration provides an overview of the tasks and commands of a system administrator.*

- The Role of a System Administrator
- Using System Procedures
- Creating and Dropping Database Devices
- Creating and Altering Databases
- Managing Segments

## **Sybase: User Administration**

**4 hours**

**SYBC04**

*Sybase: User Administration shows users how to manage user accounts and groups in Sybase.*

- Managing Server Logins
- Managing User Access and Aliases
- Managing Groups
- Assigning and Managing Roles
- Granting Permissions
- Revoking and Modifying Permissions

**Sybase: Programming with T-SQL****4 hours****SYBC05**

*Sybase: Programming with T-SQL introduces users to basic T-SQL commands and functions through the isql interface.*

- Using T-SQL and isql
- Managing Tables
- Defining Integrity Constraints
- Creating Integrity Defaults and Rules
- Using Views
- Managing Indexes

**Sybase: Querying Databases with T-SQL****4 hours****SYBC06**

*Sybase: Querying Databases with T-SQL shows users how to create database queries and to manipulate the data received through queries.*

- Introduction to Queries
- Using Functions in Queries
- Manipulating Query Data
- Ordering and Grouping Query Results
- Combining Queries and View Queries

**Sybase: T-SQL Commands****4 hours****SYBC07**

*Sybase: T-SQL Commands explains how to join queries, create sub queries, and how to insert and modify data in Sybase.*

- Join Queries
- Sub queries
- Other Sub query Types
- Inserting Data
- Deleting and Modifying Data

# UNIX Systems Series

**Total Time: 40 hours**

## **UNIX: Introduction to UNIX**

**4 hours**

**UNXTC1**

*Introduction to UNIX presents the features of UNIX that are most useful to new users, including logging in and out, file administration, command processing, displaying text, and using mail.*

- Introduction to UNIX
- The File System
- Processing Commands
- Some Utility Programs

## **UNIX: Shells: Bourne, Korn, and C**

**8 hours**

**UNXTC3**

*UNIX Shells - Bourne, Korn, and C presents the three shells that are typically available on a UNIX system. It describes how to get the most out of the three shells, and describes the advantages and disadvantages of each shell.*

- What Is a Shell?
- Bourne Shell
- Korn Shell
- C Shell
- Shell Comparison

## **UNIX: Shell Programming**

**6 hours**

**UNXTC4**

*Shell Programming presents the basics of shell programming using the Bourne shell, then covers additional features of the Korn and C shells.*

- Bourne Shell Programming
- Korn Shell Programming
- C Shell Programming
- Using Shell Scripts

**UNIX: System Administration I****6 hours****UNXTC5**

*System Administration I covers installing UNIX, and setting up and maintaining file systems and user accounts.*

- UNIX Installation Basics
- Starting Up and Shutting Down
- File System Administration
- User Administration

**UNIX: System Administration II****8 hours****UNXTC6**

*System Administration II presents UNIX system accounting, performance monitoring, device management, and UNIX security.*

- System Accounting
- Performance Monitoring
- Device Administration
- UNIX System Security

**UNIX: Process Management****10 hours****UNXTC7**

*Process Management describes how to control programs in UNIX, including how to start a job (program) and how to kill it.*

- What is a Process?
- Administering Processes
- Scheduling Processes

# Visual Basic 4.0 Series

**Total Time: 16 hours**

## **Visual Basic 4.0: Beginning Skills**

**4 hours**

**VB4TC1**

*Beginning Skills explains the principles involved in developing robust applications. Users develop their programming skills while building a solid understanding of Visual Basic. Each program teaches a new concept in Visual Basic and shows users how to apply the concept to their programs.*

- Writing Your First Program
- Properties and Controls
- Programming Building Blocks
- The Mouse
- Menus
- Dialog Boxes
- Graphics Controls

## **Visual Basic 4.0: Intermediate Skills**

**4 hours**

**VB4TC2**

*Intermediate Skills explains some of the more powerful features of Visual Basic. Users expand their programming skills while learning how to use Visual Basic to interface with the screen, the keyboard, Windows, and the file-system.*

- Graphics Methods
- The Grid Control
- Displaying and Printing
- Interfacing with Windows
- The Keyboard
- File-System Controls
- Accessing Files

## **Visual Basic 4.0: Advanced Skills**

**4 hours**

**VB4TC3**

*Advanced Skills teaches the more advanced features of Visual Basic. Users hone their programming skills by developing advanced applications which employ the most sophisticated features of Visual Basic, such as interfacing with databases, creating multiple-document interface applications, and using OLE 2.0.*

- Arrays, OLE, and Other Topics
- The Data Control and SQL
- Multiple-Document Interface
- Sending Keystrokes and the Spin Control
- Adding Your Own Custom Property to a Form

Next Recommended Course

## **Visual Basic 5.0: Windows API and ActiveX**

**4 hours**

**VB5C04**

*Visual Basic 5.0: Windows API and ActiveX teaches how to extend the functionality of Visual Basic programs by using the Windows API and by creating and using OCX ActiveX controls.*

- Adding Multimedia Controls
- Enhancing the MyUSAMap Program
- Using Windows API
- Building Your Own OCX ActiveX Controls
- Testing OCX ActiveX Controls
- Adding Procedures to OCX ActiveX Controls
- Adding Properties to OCX ActiveX Controls

# Visual Basic 5.0 Series

**Total Time: 16 hours**

## **Visual Basic 5.0: Beginning Skills**

**4 hours**

**VB5C01**

*Visual Basic 5.0: Beginning Skills explains the principles involved in developing robust applications. Users develop their programming skills while building a solid understanding of Visual Basic. Each program teaches a new concept in Visual Basic and shows users how to apply the concept to their programs.*

- Properties and Controls
- Programming Building Blocks
- The Mouse
- Menus
- Dialog Boxes
- Graphics Controls

## **Visual Basic 5.0: Intermediate Skills**

**4 hours**

**VB5C02**

*Intermediate Skills explains some of the more powerful features of Visual Basic. You'll expand your programming skills while learning how to use Visual Basic to interface with the screen, the keyboard, Windows, and the file-system.*

- Graphics Methods
- The Grid Control
- Displaying and Printing
- Interfacing with Windows
- The Keyboard
- File-System Controls
- Accessing Files

## **Visual Basic 5.0: Advanced Skills**

**4 hours**

**VB5C03**

*Visual Basic 5.0: Advanced Skills teaches the more advanced features of Visual Basic. Users hone their programming skills by developing advanced applications which employ the most sophisticated features of Visual Basic, such as interfacing with databases, creating multiple-document interface applications, and using OLE 2.0.*

- The Data Control and SQL
- Multiple-Document Interface
- Sending Keystrokes and the Spin Control
- Adding Your Own Custom Property to a Form

## **Visual Basic 5.0: Windows API and ActiveX**

**4 hours**

**VB5C04**

*Visual Basic 5.0: Windows API and ActiveX teaches how to extend the functionality of Visual Basic programs by using the Windows API and by creating and using OCX ActiveX controls.*

- Adding Multimedia Controls
- Enhancing the MyUSAMap Program
- Using Windows API
- Building Your Own OCX ActiveX Controls
- Testing OCX ActiveX Controls
- Adding Procedures to OCX ActiveX Controls
- Adding Properties to OCX ActiveX Controls

## Visual Basic 6 Series

**Total Time: 32 hours**

### **Visual Basic 6: Programming Basics**

**4 hours**

**V6BC01**

*Visual Basic 6: Programming Basics provides the user with a foundation for using Visual Basic 6 software. In this course the user creates an application using the VB Application Wizard, and then develops a simple application from scratch.*

- Programming with Visual Basic
- Using the Development Environment
- Introduction to Programs
- Looking at Programs
- Creating Your First Application
- Creating Controls
- Setting Properties
- Creating a Project From Scratch

### **Visual Basic 6: Controls and Coding**

**3 hours**

**V6BC02**

*Visual Basic 6: Controls and Coding explains how to use common controls and simple code to create applications in Visual Basic.*

- Labels, Text Boxes and Buttons
- Coding Basics
- Storing and Calculating Data

### **Visual Basic 6: Coding the Details**

**4 hours**

**V6BC03**

*Visual Basic 6: Coding the Details examines some of Visual Basic's coding tools for building applications.*

- Built-in Functions
- Message and Input Boxes
- Remarks
- Comparisons
- The If Statement
- Working with Comparisons
- Do Loops
- The For Loop

### **Visual Basic 6: Lists and More Controls**

**6 hours**

**V6BC04**

*Visual Basic 6: Lists and More Controls explains how to add many of the finishing touches and extra controls and arrays for users interested in using Visual Basic to create applications.*

- Building an Interest Calculator Application
- Creating the Rest of the Application
- Putting on the Finishing Touches
- List and Combo Boxes
- Data Arrays
- Option Buttons
- Check Boxes, Scroll Bars, and Timers

**Visual Basic 6: Using Supplied Tools****4 hours****V6BC05**

*Visual Basic 6: Using Supplied Tools explains how to use some of the built-in tools in Visual Basic to improve and expand applications.*

- Calling Procedures
- Coding Subroutines and Functions
- Coding Arguments
- Built-In Functions
- Data and Formatting Functions
- The Common Dialog Box

**Visual Basic 6: Data Files and Printing****3 hours****V6BC06**

*Visual Basic 6: Data Files and Printing introduces students to interacting with data files and printing information from their applications.*

- Managing Files
- Reading and Writing Data
- Database Processing
- Creating a Database Application
- Printing from an Application

**Visual Basic 6: Program Tuning****5 hours****V6BC07**

*Visual Basic 6: Program Tuning explains how to add to an application some of the additional tools that Visual Basic offers.*

- Creating Menus
- Filling in the Menus
- Images and Pictures
- Creating an Animated Application
- Toolbars
- Line and Shape Controls

**Visual Basic 6: Delivering the Program****3 hours****V6BC08**

*Visual Basic 6: Delivering the Program explains how to prepare a Visual Basic program for distribution.*

- Debugging
- Stepping through Code
- Debugging with the Watch and Immediate Windows
- Installing Applications