

C O U R S E F E A T U R E S

Computer Technology Specialist

(5-day Instructor-Led Course)



Course Overview

The *CBP™ Computer Technology Specialist Certification* provides the business professional with working knowledge of the essential computer technology concepts required to survive in today's technological workplace. Computer technology is now fully integrated into most aspects of living and business, and, as such, the business professional must possess core knowledge of computing to excel. Almost every job has a core set of technology and business components that requires the professional to develop both information technology and business skills.

The *CBP™ Computer Technology Specialist Certification* covers a wide range of computer technologies such as computer architecture, software applications, computer devices, computer accessories, networking, internet technologies, electronic commerce, and computer security.

Who Should Attend

The course is recommended for anyone who works in a computerized environment.

Prerequisites

This course requires that students meet the following prerequisites:

1. The candidate must have a commitment to the pursuit of excellence.
2. The candidate must have completed or be in the process of completing a high school or secondary school diploma or similar educational standards.
3. No prior computer experience is required.

What You Will Accomplish

The CBP Computer Technology Specialist student guide covers the following computer technology essentials:

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|------------------------------|------------------------------------|
| - Introduction to Computers | - Networking Essentials |
| - Computer Architecture | - Internet Technology and Concepts |
| - Computer Storage Solutions | - Electronic Commerce |
| - Input and Output Devices | - Computer Security Measures |
| - Software Applications | |

Course Materials

Students will receive an official course manual for post-class reference and review.

Certification Preparation

This course prepares candidates to sit the Certified Business Professional exam – **E40-709**

Course Outline: CBP™ Computer Technology Specialist

Module 1: Introduction to Computers

- The Computer
- Types of Computers
- PCs: Desktops, Laptops, Tablet PCs, iPads, and Handheld Computers
- Servers
- Mainframe Computers
- Centralized Computing
- Minicomputers

Module 2: PC Architecture and Components

- PC Architecture
- Computer Case & Power Supply Unit
- System Board & Expansion Slots
- Central Processing Unit (CPU)
- Computer Memory
- Video Card & Graphics Processing Unit (GPU)
- BIOS Chip & CMOS Memory Chip
- The PC Boot Sequence

Module 3: Computer Storage Systems

- Computer Storage Solutions
- Hard Drive Storage
- CD-ROM & CD Usage Guidelines
- CD-ROM/CD-RW Drive Speeds
- DVD-ROM Drives & Usage Guidelines
- High Definition Optical drives
- Tape Backup Drives
- USB Disk & Flash Storage
- Solid State drives & Cloud Storage

Module 4: Input/Output Devices

- Input Devices: The Keyboard, The Mouse, Pointing Devices
- Other Input Devices: Scanners, Digital Cameras & Microphones
- Output Devices: Monitors
- Printers: Dot-Matrix Printers, Inkjet & Bubble Jet Printers & Laser Printers, Multifunction, 3D
- Plotters & Speakers
- Connecting Input/ Output Devices: Serial, Parallel, Universal Serial Bus, SCSI & FireWire Connections

Module 5: Computer Software

- Computer Software
- Types of Computer Software
- Operating Systems (OS): DOS, Microsoft Windows, UNIX, Linux & Macintosh
- Network Operating System (NOS): Microsoft Windows Server, UNIX & Linux
- Common Applications
- File Extensions
- Computer Performance

Module 6: Networking Essentials

- Understanding Networks
- Networking Components
- Types of Networks
- Transmission Media: Cable Media & Wireless Media, and Bluetooth
- Media Access Protocols
- Network Connectivity Devices: Network Interface Cards (NIC), Modems, Repeaters, Hubs, Bridges, Switches, Routers & Gateways
- Network Protocols
- The Network Operating System (NOS)
- Network Services
- Peer-to-Peer Architecture
- Client/Server Architecture

Module 7: Internet Technology and Concepts

- Understanding the Internet
- Internet History
- Internet Today
- The Internet Structure
- IP Addresses
- Domain Naming System (DNS)
- Intranets, Extranets & VPNs
- Connecting to the Internet: Cable Modems, Digital Subscriber Lines, Fiber Optics, & Wireless Access, Mobile Access
- Internet Services: WWW Services, FTP Services, Email Services, Internet Telephony & Internet Messaging, and Social Networking

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Module 8: Electronic Commerce

- Electronic Commerce (E-Commerce)
- Traditional Commerce vs. E-Commerce
- E-Commerce Challenges: Internet Taxation, Security, Intellectual Property & Legitimacy
- Types of E-Commerce: Business-to-Business (B2B) E-Commerce, Business-to-Consumer (B2C) E-commerce & Online Auctions
- Setting Up an E-Commerce Solution
 - ⇒ Determining your Business Model
 - ⇒ Registering your Domain Name
 - ⇒ Hosting your Website
 - ⇒ Building your Website
 - ⇒ E-Commerce Enabling Your Website
 - ⇒ Marketing Your Website

Module 9: Computer Security Measures

- Computer Security
- Methods of Attack: DoS's, Social Engineering, Brute Force, Spoofing, Spamming, Sniffers, Viruses & Theft
- Computer Security Measures: Administrative, Technology & Physical Measures
- Technology-based Measures: Biometrics Password, Access Control Lists (ACLs), Auditing & Firewalls
- Understanding Viruses
- Types of Viruses: MBR viruses, Macro Viruses, File Infector Viruses, Virus Hoaxes, Worms & Trojans
- Antivirus Software: The Antivirus Engine & Virus Definition Files
- Virus Protection Software
- Antivirus Guidelines
- Spyware
- Updating Software
- Encryption: Symmetric Encryption & Asymmetric Encryption
- Digital Signatures & Digital Certificates
- Backup Strategies: Full, Incremental & Differential Backups