

CompTIA A+ Core 2 (220-1102)

Prepare for CompTIA A+ Core 2 (220-1102) with practical IT support training. CBT Nuggets' CompTIA A+ certification training for the Core 2 (220-1102) exam equips you with essential IT support skills and the confidence to pass your exam. This comprehensive CompTIA A+ course covers operating systems (Windows, macOS, Linux), security essentials like MFA, firewalls, and malware removal, software troubleshooting and command-line tools (ipconfig, sfc, etc.), and operational procedures including documentation and ticketing systems. Learn how to use tools like BitLocker, manage Active Directory, implement mobile device management (MDM), and troubleshoot common system issues. With engaging video lessons, practice exams, and a free CompTIA A+ study guide to help you stay on track, you'll develop real-world IT support experience fast. Whether you're new to IT or looking to validate your skills, our CompTIA A+ training offers flexible, self-paced learning with 24/7 access to expert instruction. Start preparing to earn your certification and boost your IT career.

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 **STUDY PLAN**

WEEK 1

Basic Features of Microsoft Windows Editions

Previous Versions and Windows 11

Windows 10 Editions Overview

Windows 10 Editions and Limits

Upgrade Paths and Higher-Level Features

Additional Windows Tools

Overview

Configure Policy with Group Policy Editor

Gather Data with System Information

Manage Windows with System Configuration

Optimize Storage with Disk Cleanup and Disk Defragment

Edit the Registry

Introducing the Command-Line, File and Disk Commands

Overview

Introduction to the Command Line

Navigation Commands

Copy, Xcopy, and Robocopy

Manage Disks with Diskpart and Format

WEEK 2

Networking, Policy, and Management Tools

Overview

Learn IP Info with IPCONFIG

Confirm Reachability with PING

Identify Network Hops with Tracert and PathPing
Identify Open Ports with Netstat
Network Management with Additional Commands
Implement Group Policy Commands
Final Command-Line Commands

Monitor Windows Performance and Events

Overview
Task Manager
Validate Resource Usage with Performance Monitor
Spot Check Resources with Resource Monitor
Identify Incidents in Event Viewer

Administer Windows with Management Consoles

Overview
Administer Storage with Disk Management
Automate with Task Scheduler
Administration with Device Manager
Manage Certificates with Certificate Manager

WEEK 3

Manage Local Users and Groups

Control Panel: Internet, Printers, System, and Mail

Overview
Internet Settings
Devices and Printers, Programs and Features
Configure System Settings

Control Panel Views and Mail

Control Panel - Firewall, Administrative Tools, Explorer, Power Options, and More!

Overview
Understanding Firewall Concepts
Configuring Windows Defender Firewall
Configure Sound Settings
Manage Indexing Options
Provide Assistance with Ease of Access
Access Administrative Tools and Set File Explorer Options
Choose Power Options

Manage Windows Settings

Overview
Set Gaming and Personalization Preferences
Configure Date, Time, and Language
Configure Update and Security Settings
Configure Apps
Set Privacy Preferences
Use a Microsoft Account

WEEK 4

Configure Windows Networking Features

Overview
Benefit from Domain vs Workgroup Resources
Configure Local OS Firewall Settings
Client Network Configuration

Differentiate Public and Private IP Addresses

Establish Network Connections

Application Installation and Configuration

Overview

32-Bit vs 64-Bit Applications

Evaluate Application System Requirements

Examples of System Requirements

Software Distribution Methods

Create and Use Media

Consider Application Impact

Common OS Types

Overview

Workstation Operating System Overview

Navigate the Mac OS

Navigate Linux and Chromebook

Navigate the Android OS

WEEK 5

Navigate iOS and iPadOS

Identify ext3, ext4, APFS and Compatibility

End-of-Life and Update Considerations

Perform an OS Installation and Upgrade

Overview

Local OS Installation Methods

Network OS Installation Methods

Install Using Windows Deployment Services

Perform a Clean Installation

Perform and Upgrade

Implement a Repair Installation

Access Recovery Partitions and Images

Implement MBR and GPT Disks

Features and Tools of the macOS

Overview

Get Acquainted with the macOS

Manage macOS Apps

Authenticate with Apple ID

Backup with Time Machine Backup

Protect Your Mac with Antivirus and Updates

Adjust System Preferences

Configure Features

Implement Disk Management

Features and Tools of the Linux OS

Overview

Manage Files in Bash

Adjust Permissions with chmod

WEEK 6

Adjust Ownership with chown

Manage Packages with apt-get and yum

Configure Networking with ip

Commands df, grep, and cat

Commands ps top find dig nano

Protect files with Backup

Administer Antivirus, Samba, and Updates

Summarize Security Measures and Their Purposes

Overview

Intro to Security Measures and Their Purposes

Security Overview

Multi-Factor Authentication (MFA)

Physical Security/Controls

Logical Security/Controls

Administrative Security/Controls

Active Directory SSO

Compare and Contrast Wireless Security and Authentication Methods

Overview

Intro to Wireless Security and Authentication Methods

Wireless Security and Authentication Methods Overview

WPA2 Personal

WPA3 Personal

Enterprise Authentication

Open Authentication and OWE

Detect, Remove, and Prevent Malware

Overview

Intro to Detect, Remove, and Prevent Malware

Malware Overview

WEEK 7

Detecting Malware

Removing Malware

Malware Prevention

End User Education

Explain Common Social-engineering Attacks, Threats, and Vulnerabilities

Overview

Intro to Social Engineering Attacks, Threats, and Vulnerabilities

Attacks, Threats, & Vulnerabilities Overview

Phishing Attacks

Wi-Fi Evil Twin

Dealing with Social-Engineering Attacks

Tools of the Attacker

Configure Windows for Security

Overview

Intro to Configure Windows for Security

Overview of Windows Security

MS Defender Antivirus

Windows Defender Firewall

Users and Groups

Login Options

WEEK 8

NTFS Security and Sharing

BitLocker and EFS

Explain Methods for Securing Mobile Devices

Overview

Intro to Securing Mobile Devices

Securing Mobile Devices Overview

Login and Locking

Locator Apps & Remote Wipe

Backups and Encryption

BYOD and More

MDM Solutions

Internet of Things

Use Data Destruction and Disposal Methods

Overview

Intro to Data Destruction and Disposal Methods

Data Destruction and Disposal Methods Overview

Data Disposal on Hard Disks

Shredding

Degaussing

Incinerating

Outsourcing Data Destruction and Disposal

Configure Security for a SOHO Network

Overview

Intro to Configure Security for a SOHO Network

Small Network Implementation and Security Overview

Initial Router Configuration and Firmware Update

Wireless Settings and Security

Firewall Settings

WEEK 9

Configure Browser Security

Overview

Intro to Browser Security

Browser & Security Overview

Installing a New Browser

Digital Certificates

Extensions and Plugins

Password Managers

Common Browser Settings

Troubleshoot Common Windows OS Problems

Overview

Analyze a Blue Screen of Death (BSOD)

Troubleshoot Sluggish Performance

Troubleshoot Boot Problems

Frequent Shutdowns

Resolve Application Crashes

Resolve Additional Windows Problems

Implement Common Troubleshooting Steps

Common PC Security Issues and Malware Removal Procedures

Overview

Security Issues

Security Issues

WEEK 10

Implement Malware Removal

Manage System Restore and Remediation

Prevent Future Malware Infection

Troubleshoot Common Mobile OS Application and Security Issues

Resolve Mobile OS Application Problems

Resolve Update Problems

Mitigate Battery Life Issues

Optimize Performance and Troubleshoot Reboots

Troubleshoot Autorotation and Connectivity

Mobile Apps and Security

Understand Communication and Documentation Best Practices

Overview

Introducing Effective Communication

Network Documentation

Wikis and Knowledgebases

Regulatory Issues and Documents

I.T. Policies

Incident Response Documents

Effective Communication Techniques

Professional Behaviors

WEEK 11

Explain Change Management, Backup, and Recovery

Overview

Introducing Change Management and Backups

Before the Change

During and After the Change

Types of Backups

Backup Methods

Backup Media

Restoration Objectives

Understand Common Safety and Environmental Procedures

Overview

Introducing Common Safety Procedures

Computer Component Hazards

Electrostatic Discharge Safety

Electromagnetic Interference

Workplace Safety Procedures

Common I.T. Toolkits

Equipment Disposal

Power Management

Understand Scripting Basics

Overview

Introducing Scripting Basics

Installing Python and VS Code

Hello, World

Variables

Basic Data Types

WEEK 12

Complex Data Types

Loops

Conditionals

Modules

Understand Remote Access Technologies and Tools

Overview

Introducing Remote Access Technologies

Remote Desktop Protocol

VNC

Telnet

Secure Shell (SSH)

Remote Access Tools

Summarizing Remote Access