

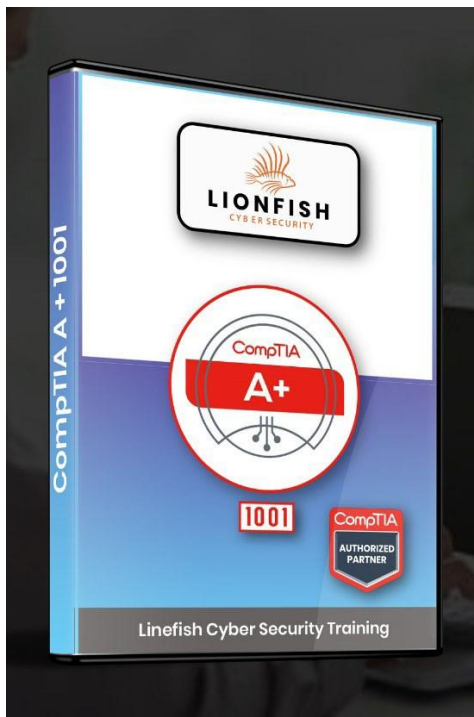


## Lionfish Cyber Security Course Syllabus:

### CompTIA A+ Core 2019 (220-1001/220-1002)

Interactive and entertaining format presented by industry leading experts.

- 40+ hours of virtual training, practice exams, labs, and study.
- Receive a Certificate of completion
- Presented by highly qualified, industry leading experts
- 12 Months Access (*Unless indicated otherwise*)



[www.LionfishCyberSecurity.com](http://www.LionfishCyberSecurity.com)  
877-732-6772 or [info@lionfishcybersecurity.com](mailto:info@lionfishcybersecurity.com)  
3815 River Crossing Pkwy Suite 100, Indianapolis, IN, 46240



## **Description**

The CompTIA A+ exam will help students demonstrate basic security skills, configuration for a variety of operating systems, troubleshooting, IT infrastructure and networking, the configuration of hardware, and data backup and recovery methods.

## **Curriculum Overview**

The CompTIA IT Fundamentals Certification is an entry level certification designed to introduce users to basic computer principles. It covers basic IT literacy and ensures one understands the different terminology and the various concepts involved in the IT industry. It also serves as a great starting point if you are just getting started in computers and is designed to be the first step on your way to pursuing the CompTIA A+ certification or others similar. Topics covered include hardware basics, troubleshooting, software installation, security and networking.

## **Objectives**

- Support operating systems.
- Install, configure, and maintain operating systems.
- Maintain and troubleshoot Microsoft Windows.
- Configure and troubleshoot network connections.
- Manage users, workstations, and shared resources.
- Implement client virtualization.

## **Prerequisites**

- Recognize the main components of a PC as well as storage media such as USB drives and DVD.
- Start the computer and navigate the operating system desktop.

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101 West Ohio Street, Suite 2000, Indianapolis, In 462042



### Training Center

- Use Windows Explorer to create directories and subdirectories and manage files.
- Use a web browser to view websites.

## **Target Audience**

- who has basic computer skills
- who desires to obtain a job as an entry-level IT technician.

## **Syllabus**

CompTIA A+ Core 1 (220-1001)	
#	Episode Name
1	Promo
2	Introduction
Chapter 0: All About the CompTIA A+	
1	CompTIA A+ Core 1 (220-1001) Introduction
2	What is the CompTIA A+?
3	Why Get CompTIA A+ Certified?
4	How to Pass the CompTIA A+ Exams
5	What is on the CompTIA A+ Core 1 (220-1001) Exam?
6	How to Use This Video Course
Chapter 1 - Safety and Professionalism	
1	Tools of the Trade
2	Troubleshooting Theory
Chapter 2 - The Visible Computer	
1	Primary PC Components
2	External Connections
3	Inside the PC
4	What is a Computer?
Chapter 3 - CPUs	
1	What is a CPU?
2	CPU Speeds and Cores



- 3 Caching
- 4 CPU Sockets
- 5 Installing a CPU
- 6 Liquid Cooling

## Chapter 4 - RAM

- 1 RAM Technology
- 2 RAM Capacity
- 3 RAM Features
- 4 Installing RAM

## Chapter 5 - Firmware

- 1 What is the BIOS?
- 2 POST
- 3 System Setup
- 4 Troubleshooting Firmware

## Chapter 6 - Motherboards

- 1 Form Factors
- 2 Chipsets
- 3 Touring the Motherboard
- 4 Touring the Case
- 5 Installing a Motherboard

## Chapter 7 - Power Supplies

- 1 The Power Supply
- 2 Mounting a Power Supply
- 3 Choosing a Power Supply
- 4 Cooling Your PC
- 5 Troubleshooting Power Supplies
- 6 Troubleshooting Core Components

## Chapter 8 - Mass Storage Technologies

- 1 Introduction to Mass Storage
- 2 Magnetic Disk Drives
- 3 Solid State Drives
- 4 SCSI
- 5 Boot Order

## Chapter 9: Implementing Mass Storage

- 1 New Installation - First Drive



- 2 RAID
- 3 Hardware RAID
- 4 Mass Storage Troubleshooting

## Chapter 10 - Essential Peripherals

- 1 Optical Media
- 2 USB Standards
- 3 Understanding USB
- 4 Configuring USB
- 5 Thunder and Lightning
- 6 Keyboards and Mice
- 7 Sight and Sound
- 8 Readers and Scanners
- 9 Using Expansion Cards

## Chapter 11: Building a PC

- 1 The Right PC for the Job

## Chapter 12 - Display Technologies

- 1 Monitor Technologies
- 2 LCD Breakdown
- 3 Graphics Cards and Connections
- 4 Installing a Graphics Card
- 5 Projectors
- 6 Troubleshooting Monitors

## Chapter 13 - Essentials of Networking

- 1 Introduction to Networking
- 2 Hubs vs. Switches
- 3 Hexadecimal
- 4 WANs and Routers
- 5 Cables and Connectors
- 6 Crimping Cables
- 7 Structured Cabling

## Chapter 14 - Local Area Networking

- 1 Introduction to TCP/IP
- 2 Network IDs and Subnet Masks
- 3 Special IP Addresses
- 4 NAT
- 5 Dynamic IP Addressing



- 6 IPv6
- 7 Port Numbers
- 8 TCP, UDP, and ICMP
- 9 Understanding DNS
- 10 Working with DNS
- 11 Windows Naming
- 12 Routers
- 13 Basic Router Configuration
- 14 Advanced Router Configuration
- 15 VLANs
- 16 Network Troubleshooting

## Chapter 15 - Wireless Networking

- 1 Wireless Network Hardware
- 2 Wi-Fi Standards
- 3 Basic WAP Setup
- 4 Connecting to a Wi-Fi Network
- 5 It's a Huge Mesh
- 6 Beyond Wi-Fi
- 7 Enterprise Wireless
- 8 Troubleshooting Wireless Connections

## Chapter 16 - The Internet

- 1 Beyond the LAN
- 2 Internet Tiers
- 3 Dial-up Connections
- 4 Broadband Connections
- 5 Firewalls and Servers
- 6 FTP
- 7 E-Mail
- 8 Proxy Servers
- 9 Virtual Private Networks (VPNs)
- 10 Internet of Things (IoT)

## Chapter 17 - Virtualization

- 1 Understanding Virtualization
- 2 Your First Virtual Machine
- 3 Advanced Virtualization Setup
- 4 Cloud Computing
- 5 Cloud Ownership



6	Cloud-Based Applications
<b>Chapter 18 - Portable Computing</b>	
1	Laptop Features
2	Laptop Hardware Troubleshooting - The Tools
3	Laptop Hardware - Core Hardware
4	Laptop Hardware - CPU and Motherboard
5	Touring Your Laptop Display
<b>Chapter 19 - Understanding Mobile Devices</b>	
1	What is a Mobile Device?
2	Mobile Connections
3	Touring Android
4	Touring iOS
5	Virtual Reality
<b>Chapter 20 - Care and Feeding of Mobile Devices</b>	
1	Maintaining Mobile Devices
2	Mobile Devices and E-mail
3	Mobile Synchronization
<b>Chapter 21 - Printers and Multifunction Devices</b>	
1	Laser Printers
2	Inkjet Printers
3	Impact Printers
4	Thermal Printers
5	Installing a Local Printer
6	Sharing Printers
7	Installing Wireless and Cloud Printers
8	Troubleshooting Printers
9	3D Printing
<b>Chapter 22 - Securing Computers</b>	
1	Dealing with Threats

<b>CompTIA A+ Core 2 (220-1002)</b>	
<b>#</b>	<b>Episode Name</b>
1	Promo



## 2 Introduction

### Chapter 0 - CompTIA A+ Core 2 (220-1002) Introduction

- 1 CompTIA A+ Core 2 (220-1002) Introduction
- 2 What is the CompTIA A+?
- 3 Why Get CompTIA A+ Certified?
- 4 How to Pass the CompTIA A+ Exams
- 5 What is on the CompTIA A+ Core 2 (220-1002) Exam?
- 6 How to Use This Video Course

### Chapter 1 - Safety and Professionalism

- 1 Professional Communication, Part 1
- 2 Professional Communication, Part 2
- 3 Physical Safety

### Chapter 2 - The Visible Computer

- 1 What is an Operating System?
- 2 Users and Super Users
- 3 Why Windows?
- 4 Windows Editions and Versions
- 5 Touring the macOS
- 6 Touring Linux

### Chapter 3 - CPUs

- 1 32-Bit vs. 64-Bit Processing

### Chapter 4 - RAM

- 1 Virtual Memory

### Chapter 5

- 1 (There are no episode from Ch. 5 in the 220-1002)

### Chapter 6

- 1 (There are no episode from Ch. 6 in the 220-1002)

### Chapter 7 - Power Supplies

- 1 Power Protection

### Chapter 8 - Mass Storage Technologies

- 1 (There are no episode from Ch. 8 in the 220-1002)

### Chapter 9 - Implementing Mass Storage

- 1 Understanding Partitioning





- 2 MBR Partitioning
- 3 GPT Partitioning
- 4 Understanding File Systems
- 5 Popular File Systems
- 6 Formatting in Action
- 7 Dynamic Disks
- 8 Software RAID in Storage Spaces
- 9 Encrypting Mass Storage

## Chapter 10 - Essential Peripherals

- 1 (There are no episode from Ch. 10 in the 220-1002)

## Chapter 11 - Building a PC

- 1 Boot from Everything
- 2 Installing Windows
- 3 Post-Installation Tasks
- 4 Windows Installation options

## Chapter 12 - Windows Under the Hood

- 1 What is the Registry?
- 2 Processes
- 3 Services
- 4 Your Windows Toolset
- 5 Windows 7 Task Manager
- 6 Windows 10 Task Manager
- 7 Information and Configuration Tools
- 8 Performance Monitor
- 9 Event Viewer
- 10 Tools for Programmers

## Chapter 13 - Users, Groups, and Permissions

- 1 Introduction to Users and Groups
- 2 Managing Users and Groups
- 3 NTFS Permissions
- 4 Linux and macOS Permissions
- 5 File Explorer
- 6 Sharing Resources
- 7 Security Policies

## Chapter 14 - Maintaining and Optimizing Operating Systems

- 1 Patch Management



- 2 Working with Disks
- 3 Working with Applications
- 4 System Restore
- 5 Backing up Your Files
- 6 Task Scheduler

## Chapter 15 - Working with the Command-Line Interface

- 1 Understanding the CLI
- 2 Navigating the CLI
- 3 Working with Folders
- 4 Working with Files
- 5 Working with Drives
- 6 Super Copy Commands
- 7 Advanced Windows Command Line
- 8 Advanced Linux Commands
- 9 Command-Line Permissions
- 10 Introduction to Scripting
- 11 Interpreted Languages

## Chapter 16 - Troubleshooting Operating Systems

- 1 Windows Recovery Environment
- 2 Advanced Windows Startup Options
- 3 Troubleshooting Boot Problems
- 4 Troubleshooting at the GUI
- 5 Troubleshooting Applications
- 6 Kernel Panic

## Chapter 17 - Display Technologies

- 1 Resolutions and Aspect Ratios
- 2 Multiple Monitors

## Chapter 18 - Essentials of Networking

- 1 Network Card Troubleshooting

## Chapter 19 - Local Area Networking

- 1 Working with Connections
- 2 Working with Workgroups
- 3 Working with Active Directory
- 4 Windows Sharing with Mac and Linux
- 5 Net Command
- 6 Firewall Configuration



- 7 Windows Firewall
- 8 Port Forwarding

## Chapter 20 - Wireless Networking

- 1 Wireless Encryption
- 2 Enterprise Wireless

## Chapter 21 - The Internet

- 1 Telnet and SSH
- 2 Remote Desktop Connections
- 3 The World Wide Web
- 4 Troubleshooting Internet Connections

## Chapter 22 - Virtualization

- 1 (There are no episode from Ch. 22 in the 220-1002)

## Chapter 23 - Portable Computing

- 1 Power Management

## Chapter 24 - Understanding Mobile Devices

- 1 (There are no episode from Ch. 24 in the 220-1002)

## Chapter 25 - Care and Feeding of Mobile Devices

- 1 Mobile Device Security
- 2 Mobile Security Troubleshooting
- 3 Mobile Device Troubleshooting

## Chapter 26 - Printers and Multifunction Devices

- 1 (There are no episode from Ch. 26 in the 220-1002)

## Chapter 27 - Securing Computers

- 1 Threats
- 2 Physical Security
- 3 Passwords and Authentication
- 4 Malware
- 5 Anti-Malware
- 6 Social Engineering
- 7 Licensing
- 8 Incident Response
- 9 Environmental Controls

## Chapter 28 - Getting Organized

- 1 Documents You Need to Know



- 2 Data You Need to Know
- 3 Change Management
- 4 The Zen of Backup
- 5 Recycling and Data Destruction

Prepare for the CompTIA A+ exams with the excellent performance-based learning tool. enable you to practice on test questions and assess your skill and knowledge of the material. Get certified the best way!

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[www.LionfishCyberSecurity.com](http://www.LionfishCyberSecurity.com)



3815 River Crossing  
Pkwy, Suite 100,  
Indianapolis,  
In 46204



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Career and Technical Schools - 10 N Senate  
Avenue, Suite SE 308, Indianapolis 46204 -  
OCTS@dwd.in.gov  
<http://www.in.gov/dwd/2731.htm>

[www.LionfishCyberSecurity.com](http://www.LionfishCyberSecurity.com)  
877-732-6772 or [info@lionfishcybersecurity.com](mailto:info@lionfishcybersecurity.com)  
101 West Ohio Street, Suite 2000, Indianapolis, In 4620413