

# CompTIA Strata IT Fundamentals Certification



## Course Outline

### 1. Basic Concepts in Computer Communication

- Two-State Communication
- Numbering Systems
- Units of Information
- Transmission Media
- Analog and Digital Communication

### 2. What is a Computer?

- Types of Computers
- Upgrading Your Computer
- Computer Components

### 3. Hardware Components: Inside the Computer Case

- Processing Devices
- Storage Devices
- Other Hardware Components

### 4. Hardware Components: Outside the Computer Case

- Input Devices
- Output Devices
- Connectors
- Removable Storage Devices
- Redundant Array of Independent Disks (RAID)
- Storage Systems

### 5. Software Components

- Operating Systems
- Device Drivers
- Applications
- Updating and Upgrading Software
- Installation Issues

### 6. The Windows Operating System (OS)

- Basic Windows OS Configuration
- Demonstration: Basic Windows Configuration
- File Systems in Windows
- File and Folder Management in Windows

### 7. Basic Concepts in Networks

- Introduction to Networks
- Types of Networks
- Network Architecture
- Network Topologies

### 8. Basic Concept in Network Communication

- The Layered Approach to Communication
- The OSI Networking Model
- The Usefulness of Identification
- Naming Devices for Humans
- Communication Protocols

## 9. Local Area Networks

- LAN Technologies and Protocols
- LAN Transmission Media
- Internetworking Devices

## 10. Common LAN and WAN Protocols

- Commonly Used Protocols

## 11. Wide Area Networks

- WAN Technologies
- WAN Transmission Media
- Internet Browsers
- Cellular Technology
- Satellite Technologies
- WAN Devices

## 12. Information Security

- CLA Triad
- Authentication
- Encryption
- Firewalls
- Network Attacks
- Access Control Methods

- Security Threats
- Recognize and Resolve Security Breaches

## 13. Maintaining, Monitoring, and Troubleshooting Your Systems

- Maintaining Your System
- Minimizing Certain Risks on Computers
- Monitoring Your System
- Troubleshooting Your System
- Monitoring and Troubleshooting Networks

## 14. Future Technologies

- Unified Communications
- Fixed Mobile Convergence
- Cloud Computing
- Other New Technologies

## 15. Green IT

- Production of IT Equipment
- Use of IT Equipment
- Maintaining IT Equipment
- Disposal of IT Equipment