

CompTIA A+ Certification Study Guide

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CompTIA A+ Core 1

Unit 1: 6/13/24

Lesson 1: Installing Motherboards and connectors

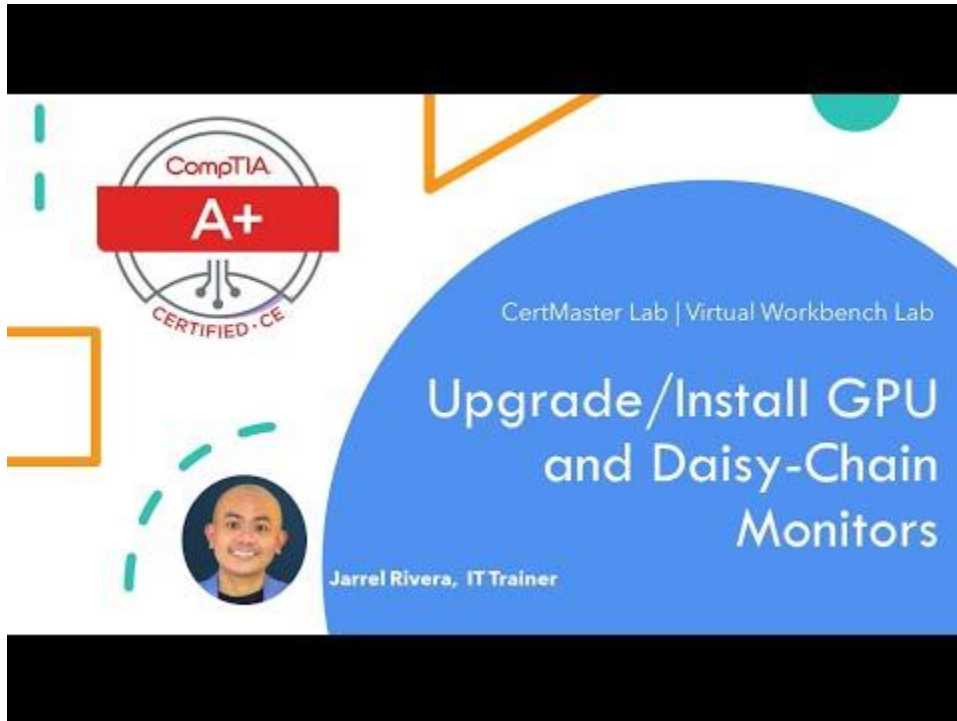
Objectives:

1. Explain cable types and connectors

2. Install and configure motherboards
3. Explain legacy cable types

Demos

How to upgrade or install GPU and Daisy-Chain Monitors | CertMaster Lab Virtual Workbench



Install a Motherboard



Virtual Workbench Lab

1. *Upgrading/ Installing GPU and Daisy-Chain Monitors*
2. *Install a Motherboard*

Review Questions

[**Motherboard Quiz**](#)

[**Connector Quiz**](#)

Unit 2: 6/18/24

Lesson 2: Installing System Devices

Objectives:

1. Install and configure power supplies and cooling
2. Select and install storage devices
3. Install and configure system memory
4. Install and configure CPUs

Demos

1. *Install Power Supply and Cooling*



2. *Install and Configure SSD Storage*



3. Install RAM



4. Install a CPU and Cooler



Virtual Workbench Labs

1. *Install Power Supplies and Cooling*
2. *Install and Configure SSD Storage*
3. *Install RAM*
4. *Install a CPU and Cooler*

Review Questions

1. [Power Supply Quiz](#)
2. [Storage Devices Quiz](#)
3. [RAM Quiz](#)
4. [CPU Quiz](#)

Unit 3 : 6/20/24

Lesson 3 : Troubleshooting PC Hardware

Objectives :

1. Apply troubleshooting methodology
2. Configure BIOS/UEFI
3. Troubleshoot power and disk issues
4. Troubleshoot system and display issues

Demos

BIOS, CMOS, UEFI - What's the difference?



Review Questions

1. [Troubleshooting Methodology Quiz](#)
2. [BIOS Quiz](#)

Unit 4: 6/25/24

Lesson 4: Comparing Local Networking Hardware

Objectives:

1. Compare network types
2. Compare networking hardware
3. Explain network cable types
4. Compare wireless networking types

Demos:

<https://www.youtube.com/watch?v=nC0Dxfyhhy0>

<https://www.youtube.com/watch?v=6wqcXbA1nCs>

Review Questions

[Common Networking Hardware Quiz \(examcompass.com\)](https://www.examcompass.com/Common-Networking-Hardware-Quiz)

Unit 5: 6/27/24

Lesson 5: Configuring Network Addressing and Internet Connections

Objectives:

1. Compare Internet connection types
2. Use basic TCP/IP concepts
3. Compare protocols and ports
4. Compare network configuration concepts

Demos:

[Configure a SOHO Router | CertMaster Lab \(youtube.com\)](https://www.certmasterlab.com/Configure-a-SOHO-Router)

Compass Review Questions

[Internet Connection Types Quiz \(examcompass.com\)](https://examcompass.com/Internet-Connection-Types-Quiz)

[Network Protocols Quiz \(examcompass.com\)](https://examcompass.com/Network-Protocols-Quiz)

[TCP & UDP Ports Quiz \(examcompass.com\)](https://examcompass.com/TCP-UDP-Ports-Quiz)

Virtual Labs:

Configure a SOHO Router

Unit 6: 7/9/24

Lesson 6: Supporting Network Services

Objectives

- Summarize services provided by networked hosts
- Compare Internet and embedded appliances
- Troubleshoot networks

Demos/Videos:

[Compare Protocols and Ports](#)

[Troubleshoot a Network Scenario #1](#)

[Troubleshoot a Network Scenario 2](#)

[Troubleshoot a Network Scenario 3](#)

[Troubleshoot a Network Scenario 4](#)

Assisted Labs

Lab Activity

- Assisted Lab: Troubleshoot a Network Scenario #1
 - Troubleshoot a network issue in a simulated network topology
- Assisted Lab: Troubleshoot a Network Scenario #2
 - Troubleshoot a problem on a home router network
- APPLIED Lab: Troubleshoot a Network Scenario #3
- APPLIED Lab: Troubleshoot a Network Scenario #4
 - Work independently to diagnose and remediate issues with a home router network

Review Questions

[Network Protocols Quiz \(examcompass.com\)](https://examcompass.com)

[Network Services Quiz \(examcompass.com\)](https://examcompass.com)

Unit 7: 7/11/24

Lesson 7: Summarizing Virtualization and Cloud Concepts

Objectives

- Summarize client-side virtualization
- Summarize cloud concepts

Review Questions

[Cloud Computing Quiz \(examcompass.com\)](https://examcompass.com)

Lesson 8: Supporting Mobile devices

Objectives

- Set up mobile devices and peripherals
- Configure mobile device apps
- Install and configure laptop hardware
- Troubleshoot mobile device issues

Demos/Videos

- [Configure Laptop Dock and External Peripherals](#)
- [Add Expansion SSD in Laptop](#)
- [Upgrade Laptop RAM](#)

Labs

Lab Activity

- Virtual Workbench Lab: Configure Laptop Dock and External Peripherals

Lab Activity

- Virtual Workbench Lab: Add Expansion SSD in a Laptop
- Virtual Workbench Lab: Update Laptop RAM

Lab Activity

- Virtual Workbench Lab: Replace Laptop Non-user Removable Battery

Unit 8: 7/16/24

Lesson 8: Supporting Mobile Devices

Objectives

- Set up mobile devices and peripherals
- Configure mobile device apps
- Install and configure laptop hardware
- Troubleshoot mobile device issues

Demos and Labs

Virtual Workbench Lab: Configure Laptop Dock and External Peripherals

[Configure Laptop Dock and External Peripherals | A+ CertMaster Labs \(youtube.com\)](#)

Virtual Workbench Lab: Add Expansion SSD in a Laptop

[Add Expansion SSD in Laptop | A+ CertMaster Labs \(youtube.com\)](#)

Virtual Workbench Lab: Update Laptop RAM

[Upgrade Laptop RAM | A+ CertMaster Labs \(youtube.com\)](#)

Virtual Workbench Lab: Replace Laptop Non-user Removable Battery

[Replace Laptop Non-User Removable Battery | A+ CertMaster Labs \(youtube.com\)](#)

Review Questions

[CompTIA A+ Certification Exam 220-1101 \(Core 1\) - Laptop Quiz \(examcompass.com\)](#)

[CompTIA A+ Certification Exam 220-1101 \(Core 1\) - Mobile Devices Quiz \(examcompass.com\)](#)

CompTIA A+ Core 2

Additional References

[Exam Compass | CompTIA Certification Practice Exams](#)

<https://www.youtube.com/@JarrelRivera/search?query=install%20a%20motherboard>