

Introduction

Introduction To The CompTIA A+ Certification

- **CompTIA** stands for the **Computing Technology Industry Association**. They are a vendor-neutral non-profit organization that provides **IT certifications**.
- The **CompTIA A+ certificate** is an **entry-level qualification** in the **IT industry**.
- The **A+ certification** consists of **two examinations**:
 1. **The core 1 examination (220-1101)**.
 - (a) Mobile Devices.
 - (b) Networking.
 - (c) Hardware.
 - (d) Virtualization and Cloud Computing.
 - (e) Network Troubleshooting.
 2. **The core 2 examination (220-1102)**.
 - (a) Operating Systems.
 - (b) Security.
 - (c) Software Troubleshooting.
 - (d) Operation Procedures.

Safety and Professionalism

Professional Communication

- **Be on time for meetings**. If you are going to be late, contact the person / people you are meeting and let them know.
- **Actively listen**, make sure that **people understand** that you are **listening** and **avoid interrupting**.
- **Clarify customer statements**, ask **specific questions** to **fully understand problems** people are having.
- Maintain a **positive attitude**, especially if correcting peoples statements.
- Use **proper language**; avoid **jargon, acronyms, and slang**.
- **Set and meet expectations**.
- Be **culturally sensitive**.
- **Don't be judgemental**.
- **Don't argue with customers** and **don't be defensive**.
- **Avoid distractions** when meeting with people.

Electromagnetism and Technology

- An **electromagnetic pulse (EMP)** or an **electrostatic discharge (ESD)** can **temporarily or permanently damage electronic equipment** by generating high voltage and high current surges.
 - **Semiconductors** are at an **elevated risk for EMP and ESD damage**.
 - The effects of **EMP and ESD damage** can be range from **being imperceptible to the eye** to **literally blowing devices apart**.

- **Electromagnetic interference (EMI)** is an **unwanted noise** or **interference** in an **electrical path or circuit** that is caused by an **outside source**. EMI can cause electronics to operate poorly, malfunction, or stop working completely.
 - If **EMI** is strong enough, it can **completely wipe hard drives**.
- **Radio frequency interference (RFI)** is **EMI within the radio frequency spectrum**.

Physical Safety

- When **working on hardware** you should always use the **appropriate safety equipment**. This includes masks and safety goggles.
- Always **disconnect electronics from their power source** before performing repairs.
- **Electrically sensitive devices** should be stored in an **antistatic bag**.
- When **performing repairs**, devices should be placed on an **antistatic (ESD) mat**.
- The device should be **grounded to the mat**, and you should be wearing an **antistatic (ESD) wrist strap** (must touch skin) that is **also grounded to the mat**.

