



# C-ID Descriptor

## Information & Communication Technology Essentials

### Descriptor Details

- **Descriptor Title:** Information & Communication Technology Essentials
- **C-ID Number:** 110
- **Units:** 4.0
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### General Description

This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level Information & Communication Technology (ICT) professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, cloud computing, and the responsibilities of an ICT professional will be introduced. A special emphasis is placed on software, hardware, and network troubleshooting techniques. This course is intended to help students prepare for the CompTIA A+ certification exams.

### Prerequisites

None

### Corequisites

None

## **Advisories**

None

## **Content**

1. Hardware
2. Networking
3. Mobile Devices
4. Operating Systems
5. Hardware & Network Troubleshooting
6. Virtualization & Cloud Computing
7. Software Troubleshooting
8. Security
9. Operational Procedures

## **Lab Activities**

No information provided

## **Objectives**

*At the conclusion of this course, the student should be able to:*

1. Demonstrate baseline security skills for IT support professionals.
2. Configure device operating systems, including Windows, Mac, Linux, Chrome OS, Android and iOS and administer client-based as well as cloud-based (SaaS) software.
3. Troubleshoot and problem solve core service and support challenges while applying best practices for documentation, change management, and scripting.
4. Support basic IT infrastructure and networking.
5. Configure and support PC, mobile and IoT device hardware.
6. Implement basic data backup and recovery methods and apply data storage and management best practices.

## **Evaluation Methods**

Evaluation will include hands-on projects and a combination of examinations, presentations, discussions, or problem-solving assignments.

### **Textbooks**

- Meyers, M., *Mike Meyers' CompTIA A+ Guide to Managing and Troubleshooting PCs (Exams 220-1001 & 220-1002)*, McGraw-Hill Education (Also consider using the accompanying Lab Manual.)
- Wempen, F. & Holcombe, J., *CompTIA A+ Certification Study Guide (Exams 220-1001 & 220-1002)*, McGraw-Hill Education
- Cisco Networking Academy, *IT Essentials Course Booklet*, Cisco Press