

CTS 220: Advanced Hardware/Software Support

COURSE DESCRIPTION:

Prerequisites: CTS 120

Corequisites: None

This course provides advanced knowledge and competencies in hardware and operating system technologies for computer technicians to support personal computers. Emphasis is placed on: configuring and upgrading; diagnosis and troubleshooting; as well as preventive maintenance of hardware and system software. Upon completion, students should be able to install, configure, diagnose, perform preventive maintenance, and maintain basic networking on personal computers. Course Hours per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

LEARNING OUTCOMES:

Upon completing requirements for this course, the student will be able to:

1. Install an operating system.
2. Perform preventative maintenance on installed systems.
3. Troubleshoot installed computer systems. Install and configure end-user systems.

OUTLINE OF INSTRUCTION:

- I. Windows Versions and Customer Service
- II. Installing Windows
- III. Setting Up a Local Network
- IV. Maintaining Windows
- V. Troubleshooting Windows After Startup
- VI. Troubleshooting Windows Startup
- VII. Securing and Sharing Windows Resources
- VIII. Security Strategies and Documentation
- IX. Supporting Mobile Devices
- X. macOS, Linux, and Scripting

REQUIRED TEXTBOOK AND MATERIAL:

The textbook and other instructional material will be determined by the instructor.