CTS 120: Hardware/Software Support

COURSE DESCRIPTION:

Prerequisites: None

Corequisites: None

This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning 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. Identify appropriate computer equipment and software based on organizational needs.
2. Demonstrate ability to upgrade/maintain existing equipment and software.
3. Repair non-functioning personal computers.

OUTLINE OF INSTRUCTION:

I. Taking a Computer Apart and Putting It Back Together
II. All About Motherboards
III. Supporting Processors and Upgrading Memory
IV. Supporting the Power System and Troubleshooting Computers
V. Supporting Hard Drives and Other Storage Devices
VI. Supporting I/O Devices
VII. Setting Up a Local Network
VIII. Network Infrastructure and Troubleshooting
IX. Supporting Mobile Devices
X. Virtualization, Cloud Computing, and Printers

REQUIRED TEXTBOOK AND MATERIAL:

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