CTS 255
ADVANCED TECHNICAL SUPPORT FUNCTIONS

COURSE DESCRIPTION:

Prerequisites: CTS 155
Corequisites: None

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Topics include technical support management techniques, evaluation, and methods of deployment for technical support technologies. Upon completion, students should be able to determine the best technologies to support and solve more complex technical support problems. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEARNING OUTCOMES:

Upon completion of the course, the student will be able to:

a. Demonstrate support of end-users through effective communication and training, both orally and in writing.
b. Identify and use basic troubleshooting strategies used to diagnose common PC issues.
c. Utilize various Active Directory tools to manage the end user environment.
d. Install and configure end-user systems.
e. Implement various Windows OS deployment strategies and patch management methods.
f. Effectively use Service Request, Asset Tracking Systems, and other utilities for effective user administration.
g. Monitor and manage network devices, servers, and workstations.
h. Assess and evaluate end-user needs and requirements.
i. Identify the basic components to a project plan and understand the role of a project manager.

OUTLINE OF INSTRUCTION:

I. Introduction to Computer User Support
   a. Understanding End Users and Common End User Issues
   b. Understanding TCO (Total Cost of Ownership) and how it applies to the IT Environment
   c. How Organizations Provide IT User Support
   d. Alternative Career Paths for IT Support Workers

II. Helpdesk Operational Practices
   a. Helpdesk, Defined
   b. Support Models
c. The Incident Management Process
d. Best Practices and Trends
e. Hardware and Software Tools

III. User Support Management
a. Best Practices
b. Remote Management using RD, RA, and RSAT
c. Using Active Directory to Manage the User Environment
d. Training Requirements/ Technical Writing for the End User
e. Creating SOPs and End User Policies for your Environment
f. Assessing End User Needs and Software
g. Network Monitoring

IV. Installation and Management of End User Systems
a. Site Assessment and Preparation
b. Ergonomics
c. Hardware and OS Setup
d. User Orientation

V. Imaging and Deployment using WDS
a. Understanding WDS and SCCM
b. Creating a Reference Computer
c. Uploading a Reference Image
d. Deploying Images using WDS

VI. Common Troubleshooting Issues
a. Troubleshooting Hardware Issues
b. Common Boot/ Startup Issues
c. Essential Command Line Utilities

REQUIRED TEXTBOOK AND MATERIALS:

To be announced by Instructor.