



Course Description

CTS2153 | Supporting Windows Users & Applications | 4.00 credits

This is an advanced course designed to help students prepare for the Microsoft Certified IT Professional Support Technician Certification. Students will learn how to install, configure and manage Windows applications in a networked Windows environment and how to support enterprise users. Students will also deploy Windows and applications using various methods, resolve installation and compatibility issues, establish group policies and user profiles, perform support functions, troubleshoot user and application issues, secure the desktop and network from unauthorized use, install software upgrades and updates, perform systems monitoring and documentation, and develop customer service skills. Prerequisite: CTS1328.

Course Competencies:

Competency 1: The student will demonstrate an understanding of Windows deployment preparation by:

1. Describing the significant steps and issues associated with Windows deployment
2. Assessing Windows hardware requirements and compatibility with existing applications and devices
3. Analyzing the business environment and selecting a deployment method
4. Performing data backup for migration to a new Windows environment
5. Documenting the Windows transition plan

Competency 2: The student will demonstrate an understanding of the Windows deployment process by:

1. Preparing a system for clean installation or upgrade
2. Describe and use the Windows deployment tools
3. Deploying Windows from a custom image
4. Migrating current applications and data after deployment
5. Performing post-installation tasks
6. Troubleshooting deployment issues
7. Resolving User Profile compatibility issues
8. Configuring application compatibility settings
9. Documenting the deployed Windows environment

Competency 3: The student will demonstrate an understanding of Windows security management by:

1. Configuring and troubleshooting Windows security
2. Configuring and troubleshooting security for Internet applications
3. Troubleshooting security configuration issues
4. Troubleshooting Windows firewall issues
5. Troubleshooting Windows Defender issues
6. Applying security updates
7. Configuring and troubleshooting access to resources
8. Troubleshooting authentication issues
9. Configuring and troubleshooting user account control

Competency 4: The student will demonstrate an understanding of managing and maintaining Windows systems by:
Describing methods of establishing and controlling group policies

1. Troubleshooting policy settings
2. Configuring and managing the Task Scheduler
3. Configuring and troubleshooting event forwarding
4. Applying and troubleshooting updates
5. Troubleshooting performance, reliability, and security issues
6. Monitoring events in an enterprise network and logging incidents

Competency 5: The student will demonstrate an understanding of installing and configuring desktop applications by:

1. Analyzing the business environment and selecting an application deployment method
2. Preparing a system for clean installation or upgrade
3. Deploying single license applications on a client computer
4. Deploying enterprise applications in a networked environment
5. Troubleshooting application software installation issues

Competency 6: The student will demonstrate an understanding of supporting and maintaining desktop applications by:

1. Performing support functions for deployed applications
2. Performing management and troubleshooting activities
3. Installing application updates and upgrades
4. Troubleshooting software application issues
5. Documenting incidents and support activities

Competency 7: The student will demonstrate an understanding of configuring and troubleshooting a Windows network environment by:

1. Configuring and troubleshooting Windows network protocols
2. Configuring and troubleshooting Windows network services for clients
3. Configuring and troubleshooting remote access
4. Troubleshooting network connectivity issues
5. Configuring and troubleshooting wireless networking
6. Configuring and testing network security
7. Troubleshooting access to network resources

Competency 8: The student will demonstrate an understanding of user support and workplace skills by:

1. Describing the roles of the IT support specialist in a business enterprise
2. Describing methods of understanding and managing user's needs and expectations
3. Describing methods of logging incidents and reporting problem resolution
4. Presenting and following oral and written instructions
5. Participating in group discussions as an IT support specialist and trainer
6. Demonstrating self-motivation and responsibility to complete an assigned task.
7. Choosing appropriate actions in situations requiring effective time management
8. Applying principles and techniques for being a productive, contributing member of a team
9. Identifying and discussing intellectual property rights and licensing issues
10. Identifying and discussing issues contained within professional codes of conduct
11. Preparing, outlining, and delivering a short IT training presentation
12. Preparing visual material to support an IT training presentation
13. Using appropriate communication skills, courtesy, manners, and dress in the workplace

Competency 9: The student will support end-user computer systems by:

1. Installing common hardware and software installation steps and wrap-up tasks
2. Performing a system installation
3. Utilizing hardware and software installation tools to perform maintenance and upgrades
4. Demonstrating common operating systems and network installation steps
5. Demonstrating common steps to install application software: Electronic mail, instant messaging, Web Browser, Word Processing, Spreadsheets, Database Management, Graphics, Desktop Publishing, Educational and Entertainment software, and Mainframe Applications
6. Demonstrating common steps for the removal of common computer viruses and spyware

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively