

Course Description

CTS2154 | IT Help Desk Support | 4.00 credits

This course is designed to prepare students as entry-level help desk computer support technicians. Students will learn skills needed to support computer users within the business organization and to provide exceptional customer service, including how to identify the appropriate tools, technologies, and processes to assess and meet computer user needs, essential communication skills, the IT function within the business organization, and career opportunities in computer user support. Prerequisites: CGS1060, CGS2108.

Course Competencies:

Competency 1: The student will demonstrate an understanding of fundamental business concepts by:

- 1. Distinguishing between different business organizations, including sole proprietorship, limited partnership, corporation, etc
- 2. Discussing the role of business in society
- 3. Describing the various functions, operations, and departments within a business organization, e.g., accounting, payroll, human resources, marketing, etc
- 4. Explaining the role of the IT function within the business organization
- 5. Defining "added value" and discussing ways to create value-added business activity processes.
- 6. Identifying issues and trends in business

Competency 2: The student will demonstrate an understanding of customer service in business by:

- 1. Defining customer service and why customer satisfaction is essential to business success
- 2. Identifying customer needs
- 3. Discussing methods to manage user's needs and expectations
- 4. Distinguishing between internal and external customers and identifying their respective needs
- 5. Identifying the information a support representative needs to know to provide quality customer service, e.g., company services, products, and policies
- 6. Describing and discussing issues contained within professional codes of conduct

Competency 3: The student will explain the role of the help desk within a technical support function by:

- 1. Describing the common ways companies organize the user support function
- 2. Explaining the increased need for user support employees
- 3. Identifying processes that support the help desk and enable quality improvement
- 4. Discuss workplace issues that affect the help desk's job function
- 5. Identifying and discussing help desk and other IT support career opportunities

Competency 4: The student will demonstrate an understanding of the basic principles of systems analysis and design by:

- 1. Describe the System Development Life cycle (SDLC) stages
- 2. Identifying Entity Relationship Diagrams (ERDs), Data Flow Diagrams (DFDs), and Functional Decomposition Charts (FDCs) and using these tools to locate data
- 3. Creating Object-Oriented modeling using the Unified Modeling Language (UML)
- 4. Differentiating between the common strategies for problem solving

Competency 5: The student will describe the program design and development process by:

- 1. Identifying several of the most prominent current programming languages
- 2. Differentiating between structured programming and object-oriented programming
- 3. Explaining processes and activities of the program development process, including life cycle modeling, predevelopment, and post-development activities

Updated: Fall 2025

4. Preparing a project management plan for an application or programming project

Competency 6: The student will demonstrate an understanding of user support and workplace skills by:

- 1. Describing the role of the IT support specialist in a business enterprise
- 2. Employing methods of logging incidents and problem resolution
- 3. Following oral and written instructions and directions
- 4. Preparing and presenting oral and written instructions and directions
- 5. Participating in group discussions as an IT support team specialist
- 6. Discussing the importance of self-motivation and follow-through on assigned tasks
- 7. Choosing appropriate actions in situations requiring effective time management
- 8. Applying principles and techniques for being a productive, contributing team member
- 9. Preparing, outlining, and delivering a short IT training presentation with visual materials to other support specialists

Competency 7: The student will demonstrate an understanding of human relations and interpersonal skills necessary for successful customer service and support performance by:

- 1. Discussing professional work ethics and the role of organizational policies and procedures
- 2. Defining the attributes of professional appearance, demeanor, honesty, integrity, responsibility initiative, respect, confidentiality, and ethical work habits
- 3. Identifying different behavioral styles and responses to each type of behavior, including ways to deal with demanding customers
- 4. Utilizing good communication skills when listening, talking, and communicating with customers and colleagues in person, in correspondence, email, and over the telephone
- 5. Analyzing the causes of listening breakdowns and solutions
- 6. Practicing telephone communication skills that are appropriate to specific customer situations

Competency 8: The student will demonstrate essential help desk support skills by

- 1. Explaining the relationship between communication skills and customer service
- 2. Applying the systematic problem-solving process to typical end-user issues
- 3. Using active listening skills and problem-solving questioning techniques to identify the nature of customer problems
- 4. Outlining and implementing steps to provide verbal solutions for customers
- 5. Outlining and implementing steps to provide clearly written email responses and solutions for customers
- 6. Identifying how to prioritize Help Desk issues
- 7. Discussing disaster recovery procedures and their relationship to IT support

Competency 9: The student will select a variety of tools and technologies that aid in the effective management of the help desk function by:

- 1. Defining the incident management process
- 2. Explaining basic information about need analysis, assessment, and problem resolution
- 3. Using case management software to log and track problem calls
- 4. Explaining how to escalate critical problems to higher levels within the support organization
- 5. Utilizing a call management strategy to prioritize incidents

Competency 10: The student will perform problem-solving activities relevant to customer support by:

- 1. Using system analysis strategies, Choosing and asking appropriate questions to isolate the customer's concern or problem
- 2. Evaluating possible solutions using a knowledge base
- 3. Explaining an action plan, including setting up realistic expectations and establishing reasonable timelines and deadlines
- 4. Maintaining customer and system documentation, resource libraries, and databases

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5. Performing research on computer support issues using Internet and database resources

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

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