Course Name: Technical Support Professional Training Program

Course Overview

The Technical Support Fundamentals course is designed to provide a strong foundation in technical support, covering hardware, operating systems, networking, and customer service. Learners will explore essential skills for troubleshooting technical issues, resolving customer concerns, and maintaining systems effectively. The course emphasizes practical knowledge, real-world problem-solving, and hands-on projects to ensure learners are well-prepared for entry-level technical support roles. It also focuses on communication and time management skills crucial for handling customers and high-pressure situations. By the end, participants will have the expertise to support various IT environments and tackle common challenges with confidence.

Course Type

Entry-Level

Course Objectives

- Equip learners with the skills to handle hardware, software, networking, and security issues.

- Build expertise in resolving technical support tickets using systematic troubleshooting methods.

- Develop effective communication and customer support skills for diverse scenarios.

- Introduce IT service management frameworks like ITIL and common service desk tools.

- Prepare learners for entry-level roles with hands-on projects and job-readiness activities.

What You'll Learn?

- Core technical skills for troubleshooting hardware, software, and network problems.

- Installation, configuration, and maintenance of Windows, macOS, and Linux operating systems.

- Fundamentals of networking, including IP addressing, DNS, and DHCP troubleshooting.

- Best practices for system security, data backup, and disaster recovery.

- IT service management processes like incident and change management using tools such as ServiceNow.

- Effective communication techniques and time management for technical support roles.

- Hands-on experience with real-world scenarios and capstone projects to build practical skills.

Duration

Approximately 100–120 hours

Requirements

- A computer with internet access for practicing installation, configuration, and troubleshooting tasks.

- Basic knowledge of computers and software applications.

Prerequisites

- No formal prerequisites; beginners are welcome.

- Familiarity with basic computer usage is beneficial but not required.

Target Audience

- Aspiring technical support professionals and IT service desk staff.

- Individuals transitioning to IT roles from non-technical backgrounds.

- Students and professionals seeking foundational IT troubleshooting skills.

- Organizations looking to train employees in technical support and customer service.

Curriculum

Module 1: Introduction to Technical Support

1.1 Overview of Technical Support Roles

 - Understanding the role of technical support.

 - Key responsibilities: troubleshooting, customer assistance, and system maintenance.

 - Tiers of technical support (Tier 1, Tier 2, Tier 3.)

1.2 Common Types of Issues Handled by Technical Support

 - Hardware issues, software issues, network problems, and security issues.

 - Break/fix support, configuration support, and problem-solving.

1.3 Understanding Service-Level Agreements (SLAs

 - Importance of SLAs in technical support.

 - Types of SLAs and how to meet them.

 - Working within defined resolution times.

Module 2: Computer Hardware and Peripherals

2.1 Hardware Components

 - Understanding the core components of a computer (CPU, RAM, Hard Drive, etc..)

 - Troubleshooting common hardware issues (boot issues, hardware failures.

 - Identifying and replacing faulty components.

2.2 Peripheral Devices

 - Overview of common peripheral devices (printers, scanners, external storage.)

 - Troubleshooting common peripheral issues (drivers, connectivity.)

 - Setting up and configuring printers and scanners.

Module 3: Operating Systems (Windows, Mac, Linux)

3.1 Understanding Operating Systems

 - Overview of Windows, macOS, and Linux.

- File systems and permissions (NTFS, ext4.

- Understanding boot processes and common errors.

3.2 Installation and Configuration of Operating Systems

- Installing and configuring Windows, macOS, and Linux.

- Upgrading OS versions and applying patches.

- Resolving OS-related issues (corrupt files, missing drivers.)

3.3 Troubleshooting Operating System Issues

- Resolving BSOD (Blue Screen of Death on Windows.

- Fixing common macOS startup issues.

- Linux command line troubleshooting for common issues.

Module 4: Networking Basics

4.1 Fundamentals of Networking

- Understanding the OSI model, TCP/IP protocol suite.

- Basic network hardware: Routers, switches, modems.

- IP addressing, DHCP, DNS, and subnetting basics.

4.2 Network Troubleshooting

- Troubleshooting connectivity issues (ping, tracert, ipconfig.)

- Identifying issues with DNS, DHCP, and firewall configurations.

- Resolving issues with Wi-Fi, VPN, and network sharing.

Module 5: Software Troubleshooting

5.1 Software Installation and Configuration

- Installing software on Windows, Mac, and Linux.

- License management and activation.

- Software patching and updates (managing compatibility issues.

5.2 Common Software Issues

- Resolving application crashes and performance issues.

- Handling compatibility issues across different OS versions.

- Working with antivirus and security software.

5.3 Remote Troubleshooting Tools

- Using remote desktop tools (TeamViewer, AnyDesk.)

- Managing remote connections and solving issues remotely.

Module 6: Security and Data Protection

6.1 Understanding Security Threats

- Introduction to common security threats (malware, phishing, ransomware.

- Recognizing and mitigating security risks.

- Installing and managing antivirus and firewall software.

6.2 Data Backup and Recovery

- Techniques for data backup (local, cloud-based solutions.)

- Restoring systems and data from backups.

- Disk cloning and disaster recovery solutions.

6.3 User Account and Access Management

- Managing user accounts in Windows, macOS, and Linux.

- Understanding role-based access control (RBAC.

- Handling password reset requests and account lockouts.

Module 7: IT Service Management

7.1 Introduction to ITIL and Service Desk Tools

- Overview of ITIL (Information Technology Infrastructure Library.)

- Understanding incident, problem, and change management.

- Working with ticketing systems (ServiceNow, Zendesk, Freshdesk.)

7.2 Handling Customer Tickets

- Logging tickets and categorizing issues.

- Tracking issue resolution and escalating when necessary.

- Managing multiple tickets effectively.

Module 8: Communication and Customer Support Skills

8.1 Effective Communication Skills for Technical Support

 - How to explain technical issues to non-technical users.

 - Communicating with frustrated or difficult customers.

 - Writing effective documentation and support guides.

8.2 Time and Stress Management

 - Prioritizing tasks under pressure.

 - Handling high-stress situations (high-priority incidents.

 - Techniques for maintaining productivity and quality.

Module 9: Troubleshooting Methodology and Best Practices

9.1 Systematic Troubleshooting Approaches

 - Understanding root cause analysis.

 - Using structured problem-solving techniques (flowcharts, checklists.

 - Preventing recurring issues through proactive maintenance.

9.2 Real-World Technical Support Scenarios

 - Hands-on practice with simulated issues.

 - Role-playing real-world customer support interactions.

 - Documenting and resolving issues step by step.

Module 10: Capstone Project and Job Preparation

10.1 Capstone Project

 - Students will work on a real-world technical support case.

 - Simulate issues, resolve them, and document the process.

- Presenting solutions and root cause analysis to peers.

10.2 Resume Writing and Interview Preparation

- Writing a strong resume tailored to technical support roles.

- Preparing for technical interviews (common questions, scenarios.

- Practicing mock interviews with a focus on troubleshooting skills.