Technical Troubleshooting for Support Agents Training Course

Professional Development Training Course Outline

Category	Customer Service and Customer Experience	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s fast-paced digital landscape, technical support agents are at the forefront of customer satisfaction and operational efficiency. Technical Troubleshooting for Support Agents Training Course equips professionals with the essential skills to quickly diagnose, resolve, and prevent technical issues across hardware, software, and network systems. This training emphasizes problem-solving, analytical thinking, and customer-centric communication, enabling support agents to enhance productivity, reduce downtime, and elevate service quality. By mastering advanced troubleshooting techniques, root cause analysis, and diagnostic tools, agents become indispensable assets in any organization’s technical support ecosystem.

This course combines hands-on exercises, real-world case studies, and interactive learning methodologies to ensure participants can confidently tackle complex technical challenges. Through structured modules, scenario-based learning, and collaborative problem-solving sessions, learners gain practical expertise while reinforcing industry-standard best practices. Participants will also develop proficiency in ticket management, incident resolution, and proactive troubleshooting strategies, fostering both technical excellence and exceptional customer service.

Programme Curriculum

Technical Troubleshooting for Support Agents Training Course

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Course Duration

5 days

Course Objectives

By the end of this training, participants will be able to:

1. Apply advanced diagnostic tools for quick and accurate troubleshooting.
2. Conduct root cause analysis to prevent recurring technical issues.
3. Resolve hardware and software problems efficiently under pressure.
4. Utilize network troubleshooting techniques for seamless connectivity.
5. Implement ticketing systems best practices to manage incidents effectively.
6. Enhance customer communication and empathy during technical resolutions.
7. Perform system optimization and performance tuning.
8. Apply cybersecurity troubleshooting to identify and mitigate threats.
9. Troubleshoot cloud-based applications and SaaS platforms.
10. Execute preventive maintenance strategies to reduce downtime.
11. Analyze error logs and system alerts to proactively address issues.
12. Leverage collaboration tools for efficient team-based problem-solving.
13. Integrate emerging AI and automation tools in technical support workflows.

Target Audience

1. Technical support agents
2. IT helpdesk professionals
3. Customer service representatives handling technical queries
4. Network support specialists
5. System administrators
6. Field support engineers
7. IT service managers
8. Technical trainers and team leads

Course Modules

Module 1: Introduction to Technical Troubleshooting

- Overview of troubleshooting methodologies
- Understanding hardware, software, and network systems
- Identifying common technical problems

- Role of a support agent in customer satisfaction
- **Case Study:** Diagnosing recurring PC crashes

Module 2: Root Cause Analysis & Problem Solving

- Steps of root cause analysis (RCA)
- Identifying patterns in incidents
- Using diagnostic tools and logs
- Problem-solving frameworks for support agents
- **Case Study:** Resolving recurring network downtime

Module 3: Hardware Troubleshooting Techniques

- Diagnosing hardware failures
- Testing and replacing components
- Preventive maintenance for devices
- Troubleshooting peripherals and connectivity
- **Case Study:** Fixing multi-device printer issues

Module 4: Software Troubleshooting & Optimization

- Identifying software conflicts and errors
- Debugging applications and OS issues
- Patching and updating software
- Performance tuning for critical applications
- **Case Study:** Resolving application crashes in a corporate environment

Module 5: Network & Connectivity Troubleshooting

- Understanding network architecture
- IP addressing and connectivity checks
- Wi-Fi, LAN, and VPN troubleshooting
- Common network issues and fixes
- **Case Study:** Restoring network access for remote teams

Module 6: Cybersecurity & Risk Mitigation

- Recognizing malware and ransomware symptoms
- Implementing security best practices
- Troubleshooting security incidents
- Incident reporting and mitigation strategies
- **Case Study:** Handling phishing attacks on a company network

Module 7: Ticket Management & Customer Communication

- Efficient ticket handling strategies
- Prioritizing incidents based on severity
- Communicating solutions to customers effectively
- Maintaining knowledge base for recurring issues
- **Case Study:** Improving SLA compliance in a support center

Module 8: Emerging Tools & Automation in Support

- AI-powered troubleshooting tools
- Automation scripts for repetitive tasks
- Remote support software usage
- Integrating monitoring tools for proactive resolution
- **Case Study:** Using AI chatbots to resolve repetitive technical queries

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price

23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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