The Telecommunications Network Specialist (TNS) Training Course

21 Apr - 02 May 2025
Sharm El-Sheikh

AGILE LEADERS
Training Center

The Telecommunications Network Specialist (TNS) Training Course

Ref.: 36250_257427 **Date:** 21 Apr - 02 May 2025 **Location:** Sharm El-Sheikh **Fees:** 4800 Euro

Course Overview:

The Course is a comprehensive program designed to provide participants with an in-depth understanding of the telecommunications industry. This course covers a wide range of topics, including Broadband Converged IP Telecom, Wireless Telecommunications, and Mobile Network Fundamentals. It is specifically tailored for non-engineers, ensuring that all participants can grasp complex concepts such as Telecom Network Core and Edge, VoIP, and MPLS and Carrier Networks. The course also delves into advanced topics like 4G LTE, 5G Spectrum and Applications, Wi-Fi Security, and Satellite Communications. Participants will gain practical knowledge in OSI Layers and Protocol Stacks, LAN Fundamentals, VLANs and Ethernet, Optical Ethernet, and IP Networks and Routing. This course is ideal for those looking to enhance their expertise in Network Address Translation NAT, IPv6, and Service Level Agreements SLA in Telecom. With a focus on real-world applications and best practices, this course equips Telecommunications Specialists with the skills needed to excel in their roles.

Target Audience:

- Telecom Engineers
- Network Administrators
- IT Managers
- Technical Support Specialists
- Telecom Project Managers
- Network Analysts
- Business Development Managers

Targeted Organizational Departments:

- Information Technology IT
- Network Operations
- Technical Support
- Engineering
- Project Management Office

Targeted Industries:

- Telecommunications
- IT Services

- Networking and Infrastructure
- Mobile Communications
- Internet Service Providers ISPs
- Government and Public Sector
- Enterprise IT

Course Offerings:

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

- Understand the fundamentals of Broadband Converged IP Telecom
- Grasp the basics of Wireless Telecommunications and Mobile Network Fundamentals
- Explain the principles of 4G LTE, 5G Spectrum, and Applications
- Ensure Wi-Fi Security and manage Satellite Communications
- Implement Voice over IP VoIP solutions and SIP Trunking
- Navigate the PSTN, LECs, CLECs, and IXCs
- Apply knowledge of OSI Layers and Protocol Stacks
- Design and manage LANs, VLANs, and Ethernet networks
- Utilize Optical Ethernet technologies
- Configure and troubleshoot IP Networks and Routing
- Perform Network Address Translation NAT and implement IPv6
- Manage MPLS and Carrier Networks
- Establish Service Level Agreements SLA in Telecom

Training Methodology:

The Telecommunications Network Specialist TNS Training Course employs a variety of training methodologies to ensure a comprehensive learning experience. These include interactive lectures, hands-on lab sessions, case studies, and group discussions. Participants will engage in real-world scenarios to apply their knowledge of Broadband Converged IP Telecom, Wireless Telecommunications, and Mobile Network Fundamentals. The course also includes role-playing exercises and simulations to enhance understanding of 4G LTE, 5G Spectrum, and Applications. Feedback sessions and assessments will be conducted regularly to gauge participants' progress and provide personalized guidance.

Course Toolbox:

- Comprehensive workbooks and manuals
- Online resources and reading materials
- Checklists and templates for telecom network design and management
- Interactive learning modules and simulations

Course Agenda:

Day 1: Introduction to Telecom Networks

- **Topic 1:** Overview of Telecommunications Network Specialist
- **Topic 2:** Fundamentals of Broadband Converged IP Telecom
- **Topic 3:** Telecom for Non-Engineers
- **Topic 4:** Understanding Telecom Network Core and Edge
- **Topic 5:** Basics of Wireless Telecommunications
- **Reflection & Review:** Recap of key concepts and interactive Q&A

Day 2: Mobile and Wireless Communications

- **Topic 1:** Mobile Network Fundamentals
- **Topic 2:** Deep Dive into 4G LTE
- **Topic 3:** Exploring 5G Spectrum and Applications
- **Topic 4:** Wi-Fi Security Essentials
- **Topic 5:** Satellite Communications Overview
- **Reflection & Review:** Group discussion and feedback session

Day 3: Voice and Protocols in Telecom

- **Topic 1:** Fundamentals of Voice over IP VoIP
- **Topic 2:** VoIP: Soft Switches and SIP Servers
- **Topic 3:** SIP Trunking Explained
- **Topic 4:** The PSTN and Analog Voiceband
- **Topic 5:** LECs, CLECs, and IXCs in Telecom
- **Reflection & Review:** Case study analysis and review

Day 4: Network Structures and Protocols

- **Topic 1:** OSI Layers and Protocol Stacks
- **Topic 2:** LAN Fundamentals
- **Topic 3:** VLANs and Ethernet Technologies
- **Topic 4:** Optical Ethernet in Practice
- **Topic 5:** IP Networks and Routing Fundamentals
- **Reflection & Review:** Practical exercises and Q&A

Day 5: Advanced Networking and Carrier Services

- **Topic 1:** Network Address Translation NAT Techniques
- **Topic 2:** Implementing IPv6
- **Topic 3:** MPLS and Carrier Networks
- **Topic 4:** Service Level Agreements SLA in Telecom
- **Topic 5:** Carrier Network Basics
- **Reflection & Review:** Knowledge check and discussion

Day 6: Telecom Equipment and Services

- **Topic 1:** Overview of Telecom Equipment
- **Topic 2:** Telecom Services for Residential and Business
- **Topic 3:** Wholesale Telecom Services
- **Topic 4:** Carrier Connections and Interoperability
- **Topic 5:** Trends in Telecom Equipment
- **Reflection & Review:** Group activity and discussion

Day 7: Telecom Convergence and Broadband

- **Topic 1:** Understanding Telecom Convergence
- **Topic 2:** Broadband Technologies and Applications
- **Topic 3:** Impact of Convergence on Telecom Services
- **Topic 4:** Future Trends in Broadband
- **Topic 5:** Case Studies in Telecom Convergence
- **Reflection & Review:** Interactive session and feedback

Day 8: Real-World Applications and Best Practices

- **Topic 1:** Best Practices in Telecom Network Management
- **Topic 2:** Case Studies in Telecom Implementations
- **Topic 3:** Practical Applications of Telecom Technologies
- **Topic 4:** Troubleshooting Common Telecom Issues
- **Topic 5:** Future-Proofing Telecom Networks
- **Reflection & Review:** Problem-solving session and review

Day 9: Regulatory and Compliance Issues in Telecom

- **Topic 1:** Overview of Telecom Regulations
- **Topic 2:** Compliance Requirements for Telecom Providers
- **Topic 3:** Impact of Regulations on Telecom Operations
- **Topic 4:** Case Studies in Regulatory Compliance
- **Topic 5:** Preparing for Regulatory Changes
- **Reflection & Review:** Regulatory review and discussion

Day 10: Developing Business Attitudes in Telecom

- **Topic 1:** Attitude and Mindset for Telecom Professionals
- **Topic 2:** Effective Communication and Leadership in Telecom
- **Topic 3:** Strategic Thinking and Problem Solving
- **Topic 4:** Adapting to Technological Changes

- **Topic 5:** Building a Customer-Centric Approach
- **Reflection & Review:** Final review and course completion

How This Course is Different from Other Telecommunications Network Specialist TNS Training Courses:

The Telecommunications Network Specialist TNS Training Course stands out from other similar courses by offering a holistic approach that combines foundational knowledge with advanced practical skills. It is specifically designed for non-engineers, making it accessible to a broader audience. The course covers the latest technologies and trends, including 4G LTE, 5G Spectrum, and Wi-Fi Security, ensuring that participants are well-versed in current industry standards. With a focus on real-world applications, the course includes hands-on lab sessions, interactive case studies, and role-playing exercises. Additionally, participants will benefit from personalized feedback and guidance, ensuring they can confidently apply their new skills in their professional roles. This comprehensive and engaging training program equips telecommunications specialists with the expertise needed to excel in today's fast-paced telecom industry.

WHO WE ARE

Agile Leaders is a renowned training center with a team of experienced experts in vocational training and development. With 20 years of industry experience, we are committed to helping executives and managers replace traditional practices with more effective and agile approaches.

OUR VISION

We aspire to be the top choice training provider for organizations seeking to embrace agile business practices. As we progress towards our vision, our focus becomes increasingly customer-centric and agile.

OUR MISSION

We are dedicated to developing value-adding, customer-centric agile training courses that deliver a clear return on investment. Guided by our core agile values, we ensure our training is actionable and impactful.

WHAT DO WE OFFER

At Agile Leaders, we offer agile, bite-sized training courses that provide a real-life return on investment. Our courses focus on enhancing knowledge, improving skills, and changing attitudes. We achieve this through engaging and interactive training techniques, including Q&As, live discussions, games, and puzzles.

AGILE LEADERS
Training Center

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Gamified and
Interactive Training

We understand that training delivery can be challenging, both online and offline. To ensure engagement and achieve learning objectives, we have developed our own activities and collaborated with industry-leading solutions to gamify our training sessions. This approach increases interaction levels and guarantees effective learning outcomes.

Our Training
Cate gories

We cover a wide range of training categories to cater to different needs and interests

Branding, Marketing, Customer Relations, & Sales Programs
Finance and Accounting Programs
Human Resources Management Programs
Management & Leadership Programs

Political & Public Relations Programs
Project Management Programs
Quality & Process Management
Self-Development Programs

Join Agile Leaders today and embark on a transformative journey towards becoming a more agile and effective leader. Experience our customer-centric approach, actionable training, and guaranteed return on investment. Let us help you unleash your full potential in the dynamic business landscape.

Where to
Find Us

You can join our training programs at our centers located in

We also offer online training sessions through the Zoom platform.

Malaysia	Morocco	Spain	France	UK	Italy	Egypt	Turkey	Georgia	Azerbaijan	UAE
Kuala Lumpur	Casablanca	Barcelona	Paris	London	Rome	Cairo Sharm El-Sheikh	Istanbul	Tbilisi	Baku	Dubai

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