Networking & TCP/IP Fundamentals (NWF)

ID NWF   **Price** 1,590.— €(excl. tax)   **Duration** 3 days

Who should attend

- Network operators, administrators, network planners, and technical support staff
- CCNA Candidates

Prerequisites

Basic Computer literacy

Course Objectives

This course, developed by Fast Lane, is tailored for network beginners interested in the challenging and exciting world of network technologies. Course topics include essential technologies, structures, functions, and data transmission methods in modern LANs and WANs.

Course Content

- LAN Basics
- Standard Models
- Devices and Media
- Switching
- Basic IP Routing
- Ports and Services
- Network Architecture
- Improving LANs
- Advanced Routing
- Security
- Certifications

Detailed Course Outline

Module 1: LAN Basics

- Lesson 1.1: Network Types
- Lesson 1.2: Network Components
- Lesson 1.3: Network Topologies
- Lesson 1.4: Network Characteristics
- Lesson 1.5: Communication Types

Module 2: Standard Models

- Lesson 2.1: Standards Overview
- Lesson 2.2: The Seven Layer Model
- Lesson 2.3: Physical & Data Link Layers
- Lesson 2.4: Network Layer
- Lesson 2.5: Transport Layer
- Lesson 2.6: Upper Layers

Module 3: Devices and Media

- Lesson 3.1: Transmission Media
- Lesson 3.2: Link Layer Devices
- Lesson 3.3: Network Layer Devices
- Lesson 3.4: Upper Layer Devices

Module 4: Switching

- Lesson 4.1: Switching Fundamentals
- Lesson 4.2: Address Resolution Protocol
- Lesson 4.3: Frame Delivery

Module 5: Basic IP Routing

- Lesson 5.1: IP Addresses
- Lesson 5.2: Subnetting
- Lesson 5.3: Internet Protocol
- Lesson 5.4: Basic Routing

Module 6: Ports and Services

- Lesson 6.1: Transport Layer
- Lesson 6.2: Application Layer

Module 7: Network Architecture

- Lesson 7.1: Design Models
- Lesson 7.2: Spanning Tree
- Lesson 7.3: First Hop Redundancy

Module 8: Improving LANs

- Lesson 8.1: Link Aggregation
- Lesson 8.2: Virtual LANs
- Lesson 8.3: Inter VLAN Routing

Module 9: Advanced Routing

- Lesson 9.1: Dynamic Routing
- Lesson 9.2: Network Address Translation
- Lesson 9.3: IPv6

Module 10: Security

- Lesson 10.1: Security Principles
- Lesson 10.2: Threats
- Lesson 10.3: Mitigation Techniques

Module 11: Certifications

- Lesson 11.1: Certifications

About Fast Lane

Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

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Germany
Fast Lane Institute for Knowledge Transfer GmbH
Tel. +49 40 25334610

info@flane.de / www.flane.de

Austria
ITLS GmbH
(Partner of Fast Lane)
Tel. +43 1 6000 8800

info@itls.at / www.itls.at

Switzerland
Fast Lane Institute for Knowledge Transfer (Switzerland) AG
Tel. +41 44 8325080

info@flane.ch / www.flane.ch