Telecom, Datacom and Networking for Non Engineers Training Course

Professional Development Training Course Outline

Category	Information Technology	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The Telecom, Datacom, and Networking for Non-Engineers Training Course is designed to bridge the technical knowledge gap for professionals who work in or interact with telecommunications, data communications, and networking industries but lack an engineering background. In today's digital economy, understanding the fundamentals of these technologies is essential for making informed decisions, enhancing collaboration with technical teams, and contributing to organizational success.

This course demystifies complex concepts and provides a practical understanding of telecom, datacom, and networking systems. Participants will learn the basics of how data is transmitted, stored, and managed, gaining insights into technologies such as IP networks, fiber optics, wireless communications, and more. Through simplified explanations and hands-on demonstrations, non-engineers can confidently navigate the technological landscape.

Programme Curriculum

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communications, and more. Through simplified explanations and hands-on demonstrations, non-engineers can confidently navigate the technological landscape.

Telecom and networking infrastructure are the backbone of modern business operations. For non-engineers, understanding the basics of these systems can significantly enhance their ability to manage projects, communicate effectively with technical stakeholders, and align strategies with technological capabilities. This course ensures that participants gain a functional knowledge of telecom and networking essentials without diving into overwhelming technical jargon. By the end of this training, participants will not only understand the core principles of telecom and networking but also appreciate how these technologies drive organizational connectivity, innovation, and growth. With real-world examples and case studies, the course provides a robust learning experience that empowers non-engineers to excel in tech-centric roles.

Course duration

5 Days

Course Objectives

1. Understand the basic principles of telecommunications and data communications.
2. Learn about networking infrastructure, including LANs, WANs, and the internet.
3. Explore wireless technologies such as Wi-Fi, cellular networks, and IoT.
4. Gain an understanding of data transmission methods, including fiber optics.
5. Familiarize themselves with key telecom and networking terminologies.
6. Learn about the roles and functions of routers, switches, and firewalls.
7. Understand the basics of IP addressing and network protocols.
8. Gain insights into cybersecurity essentials for telecom and networking systems.
9. Learn about emerging technologies like 5G, cloud computing, and SD-WAN.
10. Develop confidence in communicating effectively with technical teams.

Organizational Benefits

1. Enhance cross-functional collaboration between technical and non-technical teams.
2. Empower employees to make informed decisions on telecom and networking projects.
3. Reduce communication gaps and project delays.
4. Improve operational efficiency through better understanding of network infrastructure.
5. Strengthen cybersecurity awareness across departments.
6. Support the adoption of emerging technologies with informed stakeholders.
7. Build a workforce that understands and appreciates the role of telecom and networking.
8. Increase organizational adaptability to technological advancements.
9. Enhance client interactions with informed and tech-savvy employees.
10. Foster a culture of continuous learning and innovation.

Target Participants

- Project managers working on telecom or networking projects.
- Business analysts interacting with technical teams.
- Sales and marketing professionals in telecom or tech industries.
- Customer service representatives handling technical queries.
- Non-technical executives overseeing IT or telecom functions.
- Procurement officers involved in purchasing telecom or networking solutions.
- HR professionals managing IT/telecom talent.
- Government and regulatory officials overseeing telecom regulations.

- Educators and trainers specializing in technology fundamentals.
- Any professional interested in understanding telecom and networking basics.

Course Outline

Module 1: Introduction to Telecommunications and Data Communications

1. Overview of telecom and datacom technologies.
2. The evolution of telecommunications: From analog to digital.
3. Key components of telecom and datacom systems.
4. Telecom standards and regulatory frameworks.
5. Case Study: The impact of telecom on global connectivity.

Module 2: Networking Basics

1. Understanding LANs, WANs, and the internet.
2. The roles of routers, switches, and firewalls.
3. Introduction to IP addressing and subnetting.
4. Network protocols: TCP/IP, DNS, and DHCP.
5. Case Study: Designing a simple network for a small business.

Module 3: Wireless Communications

1. Basics of Wi-Fi, cellular networks, and IoT.
2. Overview of 4G and 5G technologies.
3. Wireless security and challenges.
4. Applications of wireless communication in various industries.
5. Case Study: Implementing a wireless network in a corporate environment.

Module 4: Data Transmission Technologies

1. Understanding fiber optics and broadband.
2. Transmission media: Copper vs. fiber vs. wireless.
3. Fundamentals of data encoding and modulation.
4. Bandwidth and latency considerations.
5. Case Study: Comparing transmission technologies for urban and rural deployment.

Module 5: Cybersecurity in Telecom and Networking

1. Importance of cybersecurity in telecom systems.
2. Common threats and vulnerabilities.
3. Role of firewalls, VPNs, and encryption.
4. Best practices for securing telecom and network infrastructure.
5. Case Study: Cybersecurity incident in a telecom network.

Module 6: Emerging Technologies in Telecom and Networking

1. Introduction to 5G and its applications.
2. Cloud computing and its impact on networking.
3. Understanding SD-WAN and its benefits.
4. Role of telecom in enabling smart cities.
5. Case Study: Deployment of 5G-enabled solutions in a smart city project.

Training Methodology

The instructor led trainings are delivered using a blended learning approach and comprises of presentations, guided sessions of practical exercise, web-based tutorials and group work. Our facilitators are seasoned industry experts with years of experience, working as professional and trainers in these fields.

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

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com