

PROJECT: IT AND NETWORKING FUNDAMENTALS

To enhance your technical proficiency, you must undergo a thorough training program in IT and networking fundamentals. The goal is to equip you with the necessary knowledge and skills to contribute effectively to the company's network and IT infrastructure project.

Objectives

- Acquire understanding of Windows and Linux operating systems.
- Learn about mobile device connectivity and security.
- Master basic operating system concepts and security.
- Configure mobile device network connectivity and email settings.
- Gain insight into the OSI model, including its layers and functionalities.
- Understand IP addressing and subnetting, including subnet mask calculation and identification of network and host portions.
- Familiarize with Access Control Lists (ACLs) and their significance in network security.
- Learn routing protocols, including distinctions between static and dynamic routing.
- Grasp best practices for network design, encompassing redundancy, load balancing, and fault tolerance.

Task List 1 – The Operating System Basics Course

Undertake **The Operating System Basics course** to gain a comprehensive understanding of configuring and maintaining various operating systems utilized in the company's IT infrastructure.

The course comprises 18 labs focusing on the specified objectives.

Access the course [HERE](#)

Task List 2 – The Networking Basics Course

Participate in **The Networking Basics course** to understand the foundation of networking and network devices, media, and protocols. You will observe data flowing through a network and configure devices to connect to networks. Finally, you will learn how to use different network applications and protocols to accomplish networking tasks.

Access the course [HERE](#)

Training Structure:

- Each course comprises multiple modules covering essential networking or operating system topics and skills.
- Hands-on activities and practical exercises reinforce learning and provide real-world experience.
- Checkpoint exams assess understanding and progress throughout the courses.
- Final exams at the course conclusion evaluate overall comprehension and knowledge retention.

INTERNAL**Account Setup:**

As part of your participation in the IT and Networking Fundamentals training program, it is essential to set up an account using your Hacktales email on the Cisco platform. This account will grant you access to the necessary resources, and course materials throughout the duration of the training. To create your account, please follow the steps below:

- Click [here](#) to access the signup page.
- Fill out the required information, including your full name, email address (please use your Hacktales email), and a secure password.
- You will receive a verification email at your Hacktales email address. Click on the verification link within the email to confirm your account and gain full access to the training materials.

Submission and Evaluation:

- Complete all modules and exams before the deadline on Sunday, August 31st, 2025.
- Upload course completion certificates to the LMS and badges on LinkedIn before the deadline.

Supplementary Reading:

To help you achieve these objectives, we have provided you with the following additional resources:

[Networking Fundamentals Playlist by Practical Networking](#)

[Subnetting Mastery](#)

[Access Control Lists](#)

[Computer Networking Course by FreeCodeCamp](#)