Introduction

3.0.1

Why should I take this module?

Welcome to Network Security Concepts!

Perhaps you've heard one of the hundreds of news stories about a data security breach within a large corporation or even a government. Was your credit card number exposed by a breach? Your private health information? Would you like to know how to prevent these data breaches? The field of network security is growing every day. This module provides a detailed landscape of the types of cybercrime and the many ways we have to fight back against cybercriminals. Let's get started!

3.0.2

What will I learn in this module?

Module Title: Network Security Concepts

Module Objective: Explain how vulnerabilities, threats, and exploits can be mitigated to enhance network security.

Topic	Topic Title
Current State of Cybersecurity	Describe the current state of cybersecurity and vectors of data loss.
Threat Actors	Describe tools used by threat actors to exploit networks.
Malware	Describe malware types.
Common Network Attacks	Describe common network attacks.
IP Vulnerabilities and Threats	Explain how IP vulnerabilities are exploited by threat actors.
TCP and UDP Vulnerabilities	Explain how TCP and UDP vulnerabilities are exploited by threat actors.
IP Services	Explain how IP services are exploited by threat actors.
Network Security Best Practices	Describe best practices for protecting a network.
Cryptography	Describe common cryptographic processes used to protect data in transit.

3.0.3

Ethical Hacking Statement

In this module, learners may be exposed to tools and techniques used by cybercriminals to demonstrate various types of attacks.

Unauthorized access to data, computer, and network systems is a crime in many jurisdictions and often is accompanied by severe consequences, regardless of the perpetrator's motivations. It is the learner's responsibility, as the user of this material, to be cognizant of and compliant with computer use laws.