

Fundamentals of Cybersecurity and Zero Trust

Module 1: Fundamentals of cybersecurity

This module provides a basic introduction to cybersecurity. It will give the student an awareness of the cybersecurity landscape, how encryption works and helps us in our day-to-day lives, and draws attention to different attack vectors that cybercriminals can exploit to gain access to your data.

Lessons

- An overview of cybersecurity
- Encryption and its uses in cybersecurity
- Verify your users and control their access
- Protect your network and data
- Every device is an attack vector
- Application vulnerabilities

Lab 1: Fundamentals of cybersecurity

- Paper-based exercise, with break-out session with scenario and discussion with the group on the outcome.

After completing this module, students will be able to:

- Describe the cybersecurity landscape.
- Discuss how encryption works, and understand its broader uses in protecting your data.
- Describe the differences between authentication and authorization.
- Describe different network types, the network threat landscape, and how to protect them from cyberattacks.
- Describe what a device is, how much a device knows about you, and how to reduce possible threats.
- Discuss how applications can be exploited to gain access to your data and assets.

Module 2: Fundamentals of a Zero Trust strategy

This module provides an introduction to the concepts of the Zero Trust framework which when applied to your current digital estate can help reduce cyberattacks and protect your organization's assets. It'll cover the five core pillars of Zero Trust: identity, endpoints, applications, networks, and data.

Lessons

- What is a Zero Trust strategy
- Identity and manage your users with Zero Trust
- Manage endpoints with Zero Trust
- Control application behavior with Zero Trust
- Protect your networks using Zero Trust
- Secure your data with Zero Trust

Lab 1: Fundamentals of a Zero Trust strategy

After completing this module, students will be able to:

- Describe the benefits of using a Zero Trust strategy to protect an organization's digital estate.
- Explain how Zero Trust can help verify a user's identity and manage their access to your data.
- Describe different endpoints and how to use Zero Trust strategies to protect them.
- Describe how cloud applications and the data they access can be protected using Zero Trust principles.
- Explain how Zero Trust can help identify cyberattacks and lateral movement in your network.
- Describe Zero Trust strategies that can help you understand your data, mitigate data loss, and protect your data.