

# NixOS for Cybersecurity

## Secure, Reproducible Computing Environments

Alin Mechenici

2025-05-15

# Course Contents

1	Course Overview	2
2	Course Objectives	3
3	Course Structure	4
4	Practical Applications	5
5	What Sets This Course Apart	6
6	Who Should Attend	7
7	Prerequisites	8
8	Instructors	9
9	Registration Information	10
10	Student Testimonials	11
11	Frequently Asked Questions	12

# Chapter 1

## Course Overview

This 4-week course introduces cybersecurity professionals and enthusiasts to NixOS as a powerful platform for building secure, reproducible computing environments. Through hands-on exercises and real-world scenarios, you'll learn how to leverage NixOS's unique approach to system configuration to enhance security posture, create consistent testing environments, and implement robust security controls.

## Chapter 2

# Course Objectives

By the end of this course, participants will be able to:

- Understand and apply NixOS's declarative approach to system configuration
- Build secure, reproducible computing environments for security operations
- Implement system hardening techniques using NixOS configuration
- Create isolated testing networks and sandboxed environments
- Deploy consistent security tooling across multiple systems
- Develop, version, and share security-focused NixOS configurations

## Chapter 3

# Course Structure

## Chapter 4

# Practical Applications

Learn how to apply NixOS in real-world cybersecurity scenarios:

## Chapter 5

# What Sets This Course Apart

## Chapter 6

# Who Should Attend

This course is ideal for:

- Security professionals looking to enhance their infrastructure security skills
- System administrators seeking to implement more secure and reproducible environments
- DevSecOps practitioners wanting to improve security integration
- Penetration testers looking for consistent testing environments
- IT professionals interested in modern approaches to system security



## Chapter 7

# Prerequisites

Participants should have:

- Basic Linux knowledge and command line experience
- Fundamental understanding of cybersecurity concepts
- Familiarity with version control systems (Git)
- Basic networking knowledge

No prior NixOS experience is required.

## Chapter 8

# Instructors

## Chapter 9

# Registration Information

## Chapter 10

# Student Testimonials

## Chapter 11

# Frequently Asked Questions