

# ThriveDX™

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# Network Security Course



# Network Security Course



## Learning Method

Live (Online),  
Instructor-Led



## Difficulty

Essentials



## Duration

40 Hours



## Pricing

\$4,950

This 40-hour Network Security Course is designed to equip IT and cybersecurity professionals with the critical skills needed to safeguard digital infrastructures. From mastering the foundations of network security systems and architecture to implementing threat detection techniques, this course offers a deep dive into essential security protocols, tools, and practices. Whether you're looking to enhance your existing skills or pivot into a network security role, our expert-led sessions provide hands-on experience and insights into the latest security technologies and strategies.

## Who Should Attend:

- IT personnel
- Security managers
- Security technicians

## Prerequisites:

- Familiarity with client-server communication models, networking concepts, and basic computer operations
- A basic understanding of potential cyber threats and security awareness

## Relevant for the Following Work Paths:

- Network Security Analyst
- SOC Analyst
- Cybersecurity Technician
- Information Security Analyst



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## Upon Completion, Participants Will Emerge With:

1

### **Mastery of Network Security Systems:**

Mastery of network security systems and architecture, including redundancy methods and design principles.

2

**Access Control Implementation:** Expertise in implementing secure management and access controls using authentication, authorization, and accounting techniques.

3

**Cryptographic Understanding:** Comprehensive understanding of network security models, cryptography, and encryption for securing data.

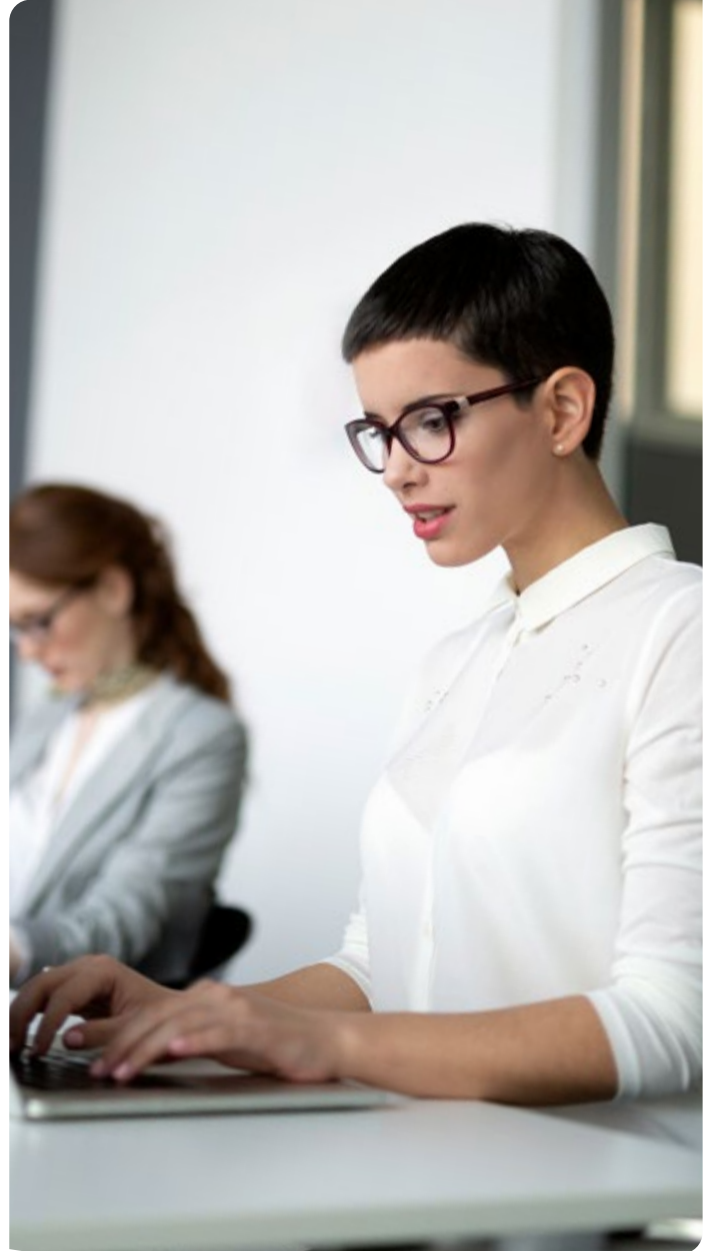
4

### **Competence in Network Monitoring:**

Proficiency in network monitoring, including using Simple Network Management Protocol (SNMP), NetFlow, and modern monitoring tools for effective network management.

5

**VPN Mastery:** In-depth knowledge of virtual private networks (VPNs), encompassing concepts, protocols, deployment options, and security considerations.



TDX

# Program Structure

## Module 1

### Network Security Systems and Architecture

- ✓ Cisco Certified CyberOps Associate
- ✓ Networking Recap
- ✓ Redundancy Methods
- ✓ Network Security Design
- ✓ Network Security Systems

## Module 2

### Secure Management and Access

- ✓ Authentication, Authorization, and Accounting
- ✓ RADIUS vs. TACACS+
- ✓ 802.1X Authentication

## Module 3

### Network Security Models and Cryptography

- ✓ Network Security Models
- ✓ Cryptography Overview
- ✓ Hash Algorithms
- ✓ Encryption
- ✓ Digital Signatures and Certificates

## Module 4

### Firewalls

- ✓ Introduction to Firewalls
- ✓ Structure and Configuration of Firewall Rules
- ✓ Firewall Services and Features
- ✓ NGFW and DPI

## Module 5

### Virtual Private Networks (VPN)

- ✓ Basic VPN Concepts
- ✓ VPN Protocols
- ✓ VPN Deployment Options
- ✓ VPN Security Considerations
- ✓ Remote Access Service

## Module 6

### Network Monitoring

- ✓ Introduction to Network Monitoring
- ✓ Simple Network Management Protocol
- ✓ NetFlow
- ✓ Key Network Monitoring Tools
- ✓ Modern Network Monitoring Tools and Techniques

## Module 7

### Network Traffic Analysis

- ✓ Introduction to Network Packet Analysis
- ✓ Wireshark and Network Packet Analysis
- ✓ NetworkMiner
- ✓ tcpdump and Zeek

## Module 8

### Network Attacks and Mitigations

- ✓ Understanding Network Attacks
- ✓ Active Network Attacks
- ✓ Data Link/OSI Layer 2 Attacks
- ✓ Network/OSI Layer 3 Attacks
- ✓ Transport/OSI Layer 4 Attacks
- ✓ Transport to Application/OSI Layers 5-7 Attacks

## Module 8

### Threat Detection, Prevention, and Response

- ✓ Introduction to IDS/IPS
- ✓ IDS/IPS Considerations
- ✓ IDS/IPS Detection Methods
- ✓ Introduction to NDR and MDR



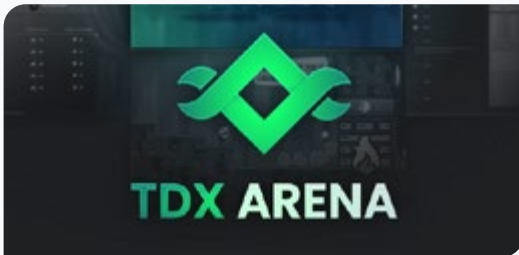


## Certification Readiness

Participants who complete the course will receive a **ThriveDX Network Security Completion Certification** to acknowledge their accomplishment. Participants who pass the final exam will also receive a **ThriveDX Cyber Practitioner Certification**.

The **ThriveDX Cybersecurity Network Certification** provides a solid foundation for pursuing further certifications. The comprehensive curriculum in this course covers the foundational knowledge essential for the CompTIA® Network+ Certification\*.

\*This course is not intended to serve as a certification preparation course. The certification subjects may change based on the provider, and additional study and other prerequisites may be necessary to meet certification requirements.



## Embedded Labs and Challenges

The course includes our state-of-the-art proprietary cloud-based digital education platform, **TDX Arena**, in which real-life scenarios and advanced tech teaching meet in a gamified environment.

