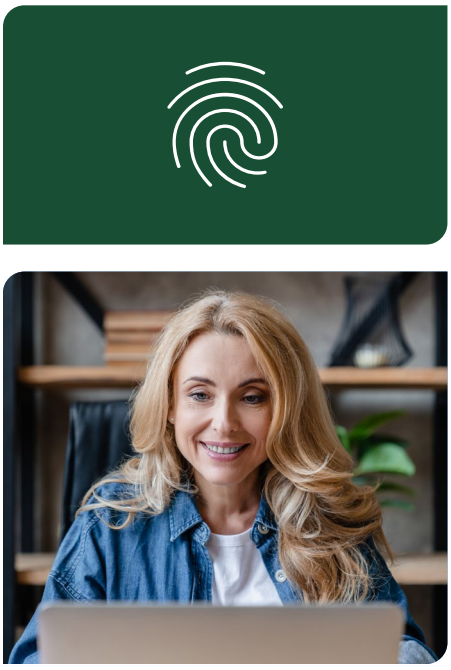
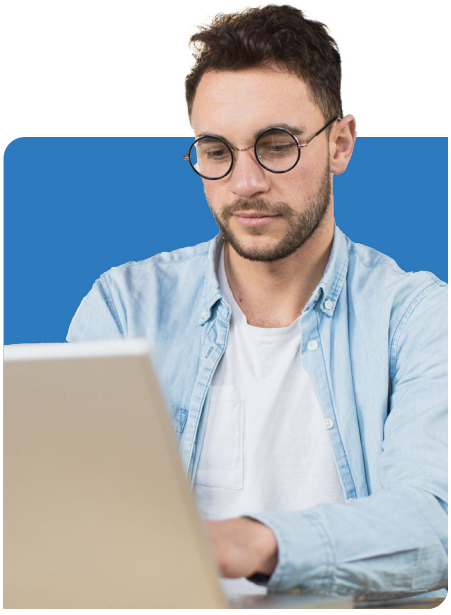
ThriveDX™

Cybersecurity Essentials Course

TDXCS-9





ThriveDX Cybersecurity Essentials Course

Time Commitment	Skill Level	Course Category
5 days (total of 40 hours / 8 hours per day)	Basic Level: Cybersecurity Essentials	Cyber Defense

This course is a comprehensive training program designed to equip participants with a broad and thorough understanding of various aspects of cybersecurity. Targeted towards IT professionals, network and system administrators, and aspiring cybersecurity experts, the course covers a wide range of topics essential for anyone looking to enhance their knowledge and skills in this rapidly evolving field.

Who Should Attend:

- IT professionals looking to enhance their knowledge in cybersecurity.
- Network and system administrators who want to improve their security skills.
- Security practitioners seeking a comprehensive understanding of various cybersecurity aspects.
- Aspiring cybersecurity professionals aiming for a foundational certification.

Prerequisites:

- Basic understanding of computer networks, including familiarity with TCP/IP protocols.
- Knowledge of operating systems, especially Linux and Windows.
- Experience in network administration, system administration, or IT support roles is beneficial.
- An understanding of fundamental security concepts and practices.

Relevant for the Following Work Roles:

- Cybersecurity Analysts
- Incident Responders and Handlers
- IT Security Administrators
- Network Security Engineers
- Security Operations Center (SOC) personnel
- Information Security Officers
- Compliance and Risk Management Officers

Upon Completion, Participants will Emerge with:

1

Enhanced Cybersecurity Skills:

Participants will gain hands-on skills in key areas of cybersecurity, improving their ability to defend against threats.

2

Operational Improvement:

Practical knowledge from the course can be directly applied to improve the security posture of organizations.

3

Compliance and Risk Management:

Understanding of various security frameworks and compliance standards.

4

Talent Development:

Investing in this training supports professional growth and skill development, aiding in talent retention.

5

Competitive Advantage:

Organizations with well-trained cybersecurity personnel are better equipped to handle emerging threats and challenges.

6

Proactive Security Posture:

Participants will learn to adopt a proactive approach to cybersecurity, anticipating and mitigating potential threats.

Program Structure

Module 1

Core Cybersecurity Concepts

- Cybersecurity Fundamentals
- Defense Strategies
- Information Security Principles

Module 2

Network Security

- Network Architecture and Secure Design
- Network Protocols
- Zero Trust Architecture
- Firewall and Intrusion Detection Systems

Module 3

Operating Systems Security

- Linux Security and Hardening
- Windows Security, Access Controls, and Group Policies
- System Monitoring and Vulnerability Management

Module 4

Cloud Computing and Virtualization

- AWS Security Essentials
- IAM and Security Groups
- Monitoring & Securing Cloud Services

Module 5

Endpoint and Mobile Security

- Data Loss Prevention
- Mobile Device Security and Management
- Endpoint Protection Technologies

Module 6

Applied Cryptography

- Cryptographic Algorithms and Key Management
- VPNs and PKI
- Cryptography in Data Protection

Module 7

Incident Response and Handling

- Incident Detection and Analysis
- Incident Response Planning
- Post-Incident Activities and Forensics
- SIEM Tools Application

Module 8

Vulnerability and Penetration Testing

- Ethical Hacking Basics
- Vulnerability Scanning Techniques
- Penetration Testing Tools and Methodologies

Module 9

Security Frameworks and Standards

- CIS Critical Controls
- NIST Cybersecurity Framework
- MITRE ATT&CK Framework

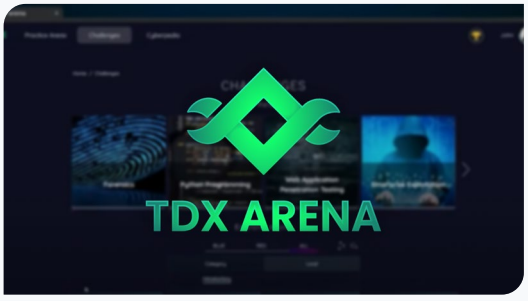
Module 10

Web and Wireless Network Security

- Web Application Security Principles
- Securing Wireless Networks
- Emerging Threats and Security Practices

Certification Readiness

All participants completing the course will receive a **ThriveDX Course Completion Certification.** Participating completing the final accreditation exam will receive a **ThriveDx Cyber Practitioner Certification**. This course also aligns with the requirements of the **GSEC certification.**



Embedded Labs and Challenges

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