CYBERSECURITY · SHORT COURSE

ICT Security (Scanning, Wireless, IoT/OT, Cryptography + Awareness)

Many organizations continue to experience high exposure to cyber threats due to:

DATES	30 Nov – 4 Dec 2026	DURATION	5-day course
COURSE FEE	TZS 1,300,000 · per participant	VAT	Fee excludes VAT
VENUE	Arusha, Tanzania	DAILY HOURS	8:30 AM – 4:30 PM
FEE INCLUDES	Course materials, lunch and refreshments	CERTIFICATE	Certificate of attendance
TRAINER	Elly International training team	APPLICATIONS	Open for applications

Overview

Many organizations continue to experience high exposure to cyber threats due to:

- Weak vulnerability scanning practices
- Poor patch management
- Insecure wireless network configurations
- Unsecured IoT and OT environments
- Misconfigured encryption settings
- Lack of practical security awareness across ICT teams

Common issues include:

- Open ports and exposed services
- Weak Wi-Fi authentication
- Poor segmentation of IoT/OT networks
- Default device credentials
- Outdated firmware
- Weak cryptographic implementation
- Lack of security testing routines

Without structured vulnerability management and environment hardening, organizations remain exposed to:

- Unauthorized access
- Lateral movement
- Data breaches
- Operational disruption
- Regulatory non-compliance

There is therefore a strong need for a practical, hands-on course focused on security scanning, wireless security, IoT/OT hardening, cryptography basics, and awareness strengthening across ICT environments.

Course content

Day 1: Vulnerability Scanning & Risk Assessment

Module 1: Vulnerability Management Fundamentals

- Types of vulnerabilities
- Risk-based prioritization
- Vulnerability lifecycle

Module 2: Scanning Techniques & Interpretation

- Network scanning basics
- Identifying open ports and services
- Reviewing scan reports
- Prioritizing remediation

Practical Session (Hands-On)

- Simulated vulnerability scan review
- Risk prioritization exercise

Day 2: Wireless Network Security

Module 3: Wireless Threat Landscape

- Rogue access points
- Weak authentication risks
- Eavesdropping attacks
- Misconfigured SSIDs

Module 4: Secure Wireless Configuration

- WPA2/WPA3 fundamentals
- Network segmentation
- Guest network isolation
- Access control policies

Practical Session (Hands-On)

- Evaluating wireless configuration scenarios
- Identifying insecure setups

Day 3: IoT/OT Security & Segmentation

Module 5: IoT & OT Risk Landscape

- Device vulnerabilities
- Operational technology risks
- Lateral movement concerns
- Industrial environment considerations

Module 6: Securing IoT/OT Environments

- Network segmentation
- Secure firmware practices
- Access control
- Monitoring strategies

Practical Session (Hands-On)

- Designing segmented IoT/OT architecture
- Identifying insecure device configurations

Day 4: Cryptography Fundamentals & Secure Implementation

Module 7: Cryptography Basics

- Symmetric vs asymmetric encryption
- Hashing and digital signatures
- Certificates and PKI fundamentals

Module 8: Secure Cryptographic Practices

- TLS basics
- Avoiding weak algorithms
- Key management principles
- Secure data transmission

Practical Session (Hands-On Labs)

- Identifying weak encryption scenarios
- Reviewing secure configuration practices

Day 5: Hardening, Awareness & Capstone

Module 9: System & Network Hardening

- Secure configuration baselines
- Patch management planning
- Access control enforcement
- Monitoring integration

Module 10: Building ICT Security Awareness

- Cross-team responsibility
- Reporting suspicious activity
- Continuous improvement roadmap

Capstone Practical Simulation
Participants will complete a comprehensive security assessment scenario including:

- Vulnerability scan review
- Wireless configuration evaluation
- IoT/OT segmentation plan
- Cryptographic configuration review
- Remediation prioritization plan
- Presentation of security improvement roadmap

Course Wrap-Up

- Practical evaluation
- Participant reflections
- Facilitator recommendations
- Certificate guidance

Who should attend

Target Group

This course is suitable for:

- Developers
- Security Analysts
- Database Administrators
- Network Engineers
- ICT Security Teams
- ICT Officers
- Infrastructure Support Teams

Recommended Prerequisites

- Basic networking knowledge
- Familiarity with ICT systems
- Introductory understanding of cybersecurity concepts

How to apply

Apply online at ellyinternational.co.tz. Your place is confirmed only after we review your application and contact you, within 1 working day.

Apply for this course | Ask on WhatsApp | Email us

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Details correct as of 28 November 2026.