Datastat Research
Building Capacity in Training and Research

DATASTAT TRAINING IN

OFFICIAL COURSE PROSPECTUS

Center for Advanced Research & Professional Development

Nairobi Training Center • Global Virtual Academy • Corporate On-Site

DEFENSE AND SECURITY

Network Defense Essentials (NDE) Training Course

Comprehensive Course Syllabus, Practical Modules & Upcoming Schedules

PROGRAM SPECIFICATIONS & HIGHLIGHTS

- **DURATION**
  5 Days Practical Hands-on
- **DELIVERY MODES**
  In-Person Class & Live Virtual
- **CERTIFICATION**
  Accredited Certificate of Completion
- **INTAKES / DATES**
  Multiple Cohort Schedules Included

PREPARED FOR:

Valued Participant

Email: training@datastatresearch.org | Issued: November 21, 2026

Academic & Professional Training Year: 2026

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Network Defense Essentials (NDE) Training Course

Defense and Security • 5 Days Intensive • Accredited Certification

Course Overview

Network Defense Essentials (NDE) Training Course equips participants with critical knowledge and practical skills to protect enterprise networks from cyber threats, unauthorized access, malware, and advanced persistent threats.

Key Skills & Software Tools Covered

MS Word • Wireshark • Kali Linux • and Splunk

Upcoming Training Schedules

Confirmed cohort intakes and venues. Both physical in-person classroom and live virtual online seats are available.

TRAINING DATES	LOCATION / VENUE	FORMAT / DURATION	INVESTMENT (FEE)
29 Dec 2025 – 2 Jan 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
29 Dec 2025 – 2 Jan 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Cape Town	Classroom / 5d	**$4,500 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Addis Ababa	Classroom / 5d	**$3,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Singapore	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Istanbul	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Bangkok	Classroom / 5d	**$5,000 USD / KES 90,000**
29 Dec 2025 – 2 Jan 2026	Accra	Classroom / 5d	**$4,000 USD / KES 90,000**
5 Jan 2026 – 9 Jan 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
5 Jan 2026 – 9 Jan 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 90,000**
5 Jan 2026 – 9 Jan 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 90,000**

* Corporate discounts and customized cohort scheduling are available for teams of 3 or more participants.

Course Curriculum & Modules

Network Defense Essentials (NDE) Training Course

Introduction

Network security is a cornerstone of modern information technology environments, as organizations increasingly rely on interconnected systems, cloud services, and digital platforms. Network Defense Essentials (NDE) Training Course equips participants with critical knowledge and practical skills to protect enterprise networks from cyber threats, unauthorized access, malware, and advanced persistent threats. Through hands-on exercises, case studies, and interactive modules, participants will learn to implement layered defenses, monitor network activity, and apply best practices in network security architecture, intrusion detection, and threat mitigation. The course emphasizes the importance of proactive defense, situational awareness, and strategic planning to safeguard sensitive data and maintain operational continuity.

Participants will also gain insights into emerging trends in network defense, including zero-trust architectures, advanced firewalls, threat intelligence, and incident response frameworks. The training fosters a comprehensive understanding of policies, compliance standards, and industry benchmarks while highlighting practical approaches to risk assessment, vulnerability management, and system hardening. By completing the course, learners will be prepared to implement robust network defense strategies, reduce security incidents, and strengthen organizational resilience against evolving cyber threats.

Course Objectives

- Understand fundamental principles of network defense and cybersecurity architecture.
- Identify common network threats, vulnerabilities, and attack vectors.
- Apply intrusion detection and prevention strategies for enterprise networks.
- Implement firewalls, VPNs, and secure network configurations.
- Use monitoring tools and threat intelligence to detect malicious activity.
- Develop incident response and disaster recovery procedures.
- Apply best practices for endpoint protection and network segmentation.
- Conduct network vulnerability assessments and penetration testing.
- Understand compliance requirements and regulatory standards in network security.
- Strengthen organizational policies and procedures for network defense.
- Integrate security awareness programs for employees and IT staff.
- Analyze emerging threats such as advanced persistent threats and ransomware.
- Develop strategies for continuous improvement in network defense operations.

Organizational Benefits

- Enhanced protection against cyber threats and data breaches
- Improved network monitoring and threat detection capabilities
- Strengthened incident response and recovery readiness
- Reduced operational downtime due to network attacks
- Increased compliance with cybersecurity regulations and standards
- Enhanced staff cybersecurity awareness and accountability
- Improved risk assessment and vulnerability management processes
- Optimized network architecture for security and efficiency
- Increased confidence among stakeholders and clients
- Competitive advantage through robust network defense practices

Target Audiences

- IT network administrators and engineers
- Cybersecurity analysts and specialists
- IT managers and system architects
- Security operations center (SOC) personnel
- Risk and compliance officers
- Incident response and digital forensics teams
- Technology consultants and auditors
- Students and researchers in information security

Course Duration: 5 days

Course Modules

Module 1: Network Security Fundamentals

- Overview of network defense principles and architecture
- Types of network threats and attack vectors
- Key concepts in confidentiality, integrity, and availability
- Security layers and defense-in-depth strategy
- Role of policies and standards in network security
- Case Study: Preventing unauthorized access in an enterprise network

Module 2: Firewalls and Network Access Control

- Firewall types, configurations, and deployment strategies
- Network segmentation and VLAN security
- Access control lists (ACLs) and policy enforcement
- Implementing VPNs for secure remote access
- Monitoring and logging firewall activity
- Case Study: Configuring a multi-tier firewall for a corporate network

Module 3: Intrusion Detection and Prevention Systems

- IDS and IPS architecture and deployment
- Signature-based vs anomaly-based detection
- Alerting, logging, and incident escalation
- Integration with security information and event management (SIEM)
- Tuning and maintaining IDS/IPS effectiveness
- Case Study: Detecting and blocking a simulated malware intrusion

Module 4: Threat Intelligence and Monitoring

- Gathering threat intelligence from multiple sources
- Network monitoring tools and traffic analysis
- Identifying suspicious patterns and behaviors
- Real-time alerting and reporting mechanisms
- Using dashboards and analytics for network defense
- Case Study: Monitoring and mitigating a targeted phishing attack

Module 5: Endpoint Security and Hardening

- Endpoint protection software and configuration
- Patch management and system updates
- Hardening servers, workstations, and network devices
- Anti-malware, anti-virus, and advanced threat protection
- Ensuring compliance with endpoint security policies
- Case Study: Securing remote endpoints during a ransomware outbreak

Module 6: Vulnerability Assessment and Penetration Testing

- Identifying network vulnerabilities and weaknesses
- Conducting ethical penetration tests
- Prioritizing remediation actions and risk mitigation
- Using vulnerability scanners and reporting tools
- Aligning findings with security improvement plans
- Case Study: Penetration test revealing misconfigured network devices

Module 7: Incident Response and Disaster Recovery

- Developing an incident response plan and team roles
- Detection, containment, eradication, and recovery steps
- Communication strategies during incidents
- Post-incident analysis and lessons learned
- Business continuity and disaster recovery planning
- Case Study: Responding to a simulated data breach incident

Module 8: Emerging Threats and Continuous Improvement

- Understanding advanced persistent threats, ransomware, and zero-day attacks
- Security trends and emerging technologies
- Continuous improvement strategies for network defense
- Security audits, compliance checks, and governance frameworks
- Building a proactive security culture across the organization
- Case Study: Implementing a zero-trust security model in an organization

Training Methodology

- Instructor-led lectures and interactive discussions
- Hands-on labs and practical configuration exercises
- Network monitoring and vulnerability assessment exercises
- Case study analysis and group problem-solving sessions

- Simulated cyber-attack and incident response scenarios
- Continuous feedback and knowledge reinforcement

Register as a group from 3 participants for a Discount

Send us an email: info@datastatresearch.org or call +254724527104

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to DATASTAT CONSULTANCY LTD account, as indicated in the invoice so as to enable us prepare better for you.

Certification & Learning Methodology

- Hands-on practical delivery with real-world datasets, case studies, and lab exercises.
- Post-training mentorship, access to class resources, and customized follow-up support.
- Participants who successfully complete the course receive an accredited Datastat Certificate of Completion.

How to Enroll & Reserve Your Seat

1. Online Registration: Visit https://datastatresearch.org/courses/network-defense-essentials-nde-training-course-13555 to register online.
2. Email Booking: Send participant details to training@datastatresearch.org for official invoice & reservation.
3. Support & Assistance: Inquire via phone +254 724 527 104 | +254 734 969 612.