ECS Ethiopia

# Accelerated IT "Bootcamp" in Addis Ababa

The objective of this program is to equip beginners and non-IT professionals with practical IT skills required to transition into job-ready IT roles. The bootcamp provides hands-on training in networking, system administration, cloud computing, cybersecurity fundamentals, and incident handling through real-world scenarios and guided practice.

## 13 WEEKS | <DATE> | FULLY ONLINE

- The program focuses on building strong IT foundations aligned with real workplace requirements.
- Designed to transform existing or new talent into entry-level IT professionals within a short time frame.
- Hands-on learning through real-world scenarios using a gamified virtual lab environment.
- Covers networking, Windows & Linux administration, cloud computing, cybersecurity, and incident response.
- Aligned with NICE/NIST Framework and CompTIA Network+ learning objectives.
- Delivered through flexible, self-paced online learning with facilitator support.
- Ideal for organizations looking to build IT talent or individuals starting an IT career path.

## TARGET AUDIENCE

- Career starters with no IT background
- Existing employees transitioning into IT roles
- IT support and helpdesk aspirants
- Network and system administrator beginners
- SOC analyst entry-level aspirants
- Organizations seeking train-to-hire IT talent
- Anyone looking to start a career in Information Technology

## THE INSTRUCTOR

Delivered by highly experienced instructors with over 10 years of expertise in cybersecurity, ICT systems, and information security. Our instructors combine hands-on operational experience with a proven track record in delivering professional training.

Training is designed to emphasize practical, scenario-based learning and hands-on labs to ensure that participants gain real-world skills applicable to their work environments.

## ABOUT ECS ETHIOPIA

ECS Ethiopia is a technology-driven company working with government bodies, municipalities, and large corporations to bring advanced global solutions to Ethiopia. As part of the ECS Group (UK), we help finance and execute major projects while fostering strong partnerships and innovation across the country.

## GLOBAL TRAINING PARTNERSHIPS

Our training programs and learning platform were developed in close collaboration with leading international training organisations. Thousands of professionals worldwide have successfully completed these programs using this training content and learning system.

ECS Ethiopia

## WEEK 01
### COMPUTER FOUNDATIONS & GENAI
Gain an understanding of the bootcamp structure and learning flow, with practical guidance on how to succeed. Learn the basics of computers and IT, the role of a network administrator, and an introduction to Generative AI.

**Topics Covered**
- Bootcamp objectives, structure, flow, and practical recommendations
- Fundamental computer and IT concepts
- Roles and responsibilities of a network administrator
- Benefits of becoming a network administrator
- Introduction to GenAI and its key characteristics

## WEEK 02
### NETWORK FUNDAMENTALS
Build a strong foundation in networking concepts. Learn network models, communication methods, and how data moves from physical cabling to application layers.

**Topics Covered**
- Core networking foundations
- Network architectures, topologies, and communication networks
- OSI model
- TCP/IP model
- Network protocols and sniffers

## WEEK 03
### NETWORK ADMINISTRATION
Develop hands-on skills required for network administration. Learn how to design, configure, and troubleshoot networks using industry tools.

**Topics Covered**
- Network administration tools (Cisco Packet Tracer)
- Virtual network configuration – IP and MAC addressing, subnetting
- Network components – switches, routers, and VLANs
- Access Control Lists (ACLs) for traffic control and security
- Common network troubleshooting techniques

## WEEK 04
### WINDOWS SYSTEM ADMINISTRATION
Learn to configure and manage Windows client and server environments while automating administrative tasks and securing systems.

**Topics Covered**
- Windows client configuration and command line usage
- Installation, configuration, and management of Windows Server
- Active Directory and Group Policy for access control
- DNS and DHCP network communication
- PowerShell scripting and automation basics

## WEEK 05
### LINUX SYSTEM ADMINISTRATION
Explore Linux system fundamentals, command-line navigation, security policies, and network configuration.

**Topics Covered**
- Linux distributions and core components
- Linux terminal navigation and file management
- User and group access control
- Security policy enforcement
- Network configuration and traffic analysis

## WEEK 06
### VIRTUALIZATION AND CLOUD COMPUTING
Understand virtualization technologies and cloud computing concepts, including security considerations for modern environments.

**Topics Covered**
- Virtualization concepts, technologies, and applications
- Networking and security in virtual environments
- Cloud fundamentals and core services
- Secure cloud architecture
- Cloud security tools and best practices

## WEEK 07
### ARTIFICIAL INTELLIGENCE
Gain insight into artificial intelligence and machine learning, including ethical considerations and real-world applications.

**Topics Covered**
- AI learning methods and machine learning applications
- Current and future impact of AI
- Ethical considerations of AI implementation
- Emerging AI trends and professional implications
- AI and text generation tools

## WEEK 08
### CYBERSECURITY FUNDAMENTALS
Learn cybersecurity basics and industry frameworks used to protect organizations against cyber threats.

**Topics Covered**
- Types, methods, and motivations of cybercriminals
- NIST and MITRE ATT&CK frameworks
- Vulnerabilities and exploits
- Common cyber threats
- Real-world incident analysis

## WEEK 09
### INFRASTRUCTURE ARCHITECTURE
Focus on infrastructure security, cryptography, and secure design principles.

Topics Covered
- Infrastructure vulnerabilities and cyber threats
- Secure infrastructure design models
- Cryptography strategies
- CIA triad model
- Network security implementation
- Authentication and access control design

## WEEK 10
### INFRASTRUCTURE AND NETWORK SECURITY
Learn to implement and manage network defense tools and secure communications.

**Topics Covered**
- VPN protocols and implementations
- Email structure and mail security risks
- Firewalls and IDS/IPS technologies
- Firewall rule implementation scenarios
- IDS/IPS alert analysis and severity evaluation

## WEEK 11
### NETWORK MONITORING AND ANALYSIS
Develop skills in network monitoring, traffic analysis, and security operations tools.

**Topics Covered**
- Real-time and historical network monitoring
- Traffic analysis and troubleshooting
- SIEM and EDR platform capabilities
- SIEM and EDR implementation
- SOAR platforms for automation and response

## WEEK 12
### INCIDENT HANDLING FUNDAMENTALS
Understand incident response processes and SOC operations used to manage security incidents.

**Topics Covered**
Incident response terminology and concepts
Roles of SOC and IR teams
NIST SP 800-61 incident response framework
Incident handling techniques and best practices
Legal, privacy, and evidence-handling considerations

## WEEK 13
### FINAL INCIDENT ANALYSIS
Apply knowledge in hands-on scenarios by performing real-world incident analysis and response activities.

**Topics Covered**
- Simulated attack scenario analysis
- Web, domain, and malware attack investigation
- Intrusion detection techniques
- Incident reporting
- Incident response execution