

**Training includes the following topics:**

- Knowledge of cybersecurity, including the impact of threats.
- Recognize the evolving cyber threat landscape, including different characteristics of cyberattacks, malware and cryptocurrency.
- Protection of data using authentication, encryption and backup.
- Learn what networks do and how they operate.
- Essentials of network devices and how to configure them.
- Understanding of core networking concepts (TCP/IP, DNS, DHCP, HTTP/S, SSH) and network troubleshooting (tcpdump, wireshark)
- Characteristics and benefits of Cloud and Virtualization technologies.
- Security and Risk Management
- Asset Security
- Security Architecture and Engineering
- Communication and Network Security
- Identity and Access Management (IAM)
- Security Assessment and Testing
- Security Operations
- Software Development Security

This training module is organized in a way that includes theory-focusing lessons, lab activities as well as practice-oriented exercises.

**Expected Results from Academy Program**

Successful Candidate should be able to engage responsibilities below:

- Global implications of cyber threats
- Ways in which networks are vulnerable to attack
- Impact of cyber-attacks on industries
- Approach to threat detection and defense
- Why cybersecurity is a growing profession
- Opportunities available for pursuing network security certifications
- Describe the tactics, techniques and procedures used by cybercriminals.
- Describe the principles of confidentiality, integrity, and availability as they relate to data states and cybersecurity countermeasures.
- Describe technologies, products and procedures used to protect confidentiality, ensure integrity and provide high availability.
- Explain how cybersecurity professionals use technologies, processes and procedures to defend all components of the network.
- Explain the purpose of laws related to cybersecurity.