

## Course key concepts

### 1. Networking

1. Networking Fundamentals
2. IPv4 Routing Overview
3. IPv6 Overview
4. Layer 2 Technologies Overview
5. Layer 3 Routing Overview
6. Open Shortest Path First (OSPF)
7. BGP
8. Services

### 2. Systems

1. Windows Server Fundamentals
2. Windows Server DNS & DHCP Services
3. Storage Solutions
4. Active Directory, Group Policies
5. Linux Fundamentals
6. Linux Server DNS, DHCP, Mail
7. Linux Security

### 3. Virtualization

1. Virtualized Servers Fundamentals
2. Virtual Machine Management
3. Configuring and Managing Virtual Networks and Virtual Storage

### 4. Automation

1. Python Programming
2. Automation Fundamentals
3. Automation Tools & Environments
4. Python Programming for Network Automation

## Expected Results from Academy Program

*Successful Candidate should be able to engage responsibilities below:*

- Install and configure network equipment
- Network design and implementation
- Install and support LANs, WANs, network segments, Internet, and intranet systems
- Perform network address assignment, assign routing protocols and routing table configuration
- Maintain network connectivity of all computer workstations
- Analyze, troubleshoot and isolate issues
- Provide network support with a variety of operating systems
- Maintain servers and associated hardware, applications, services, and settings
- Develop and monitor policies for the use of network resources
- Monitor network performance (availability, utilization, throughput, goodput, and latency) and test for weaknesses
- Building and maintaining Virtual Machines, maintaining Virtual infrastructure, and providing technical support
- Able to understand and adapt automation scripts into integrated networking system
- Program and develop new automation scripts based on various network requirements, tasks or application responses
- Update programs and schedule responses for automating repetitive system and networking tasks
- Modify automation scripts for performing regular updates of systems, security checks and update rollouts
- Create technical design documentation for systems and applications.