

System Administration

Duration: 1.5 days

- **Operating System Fundamentals**

- Overview of Windows, Linux, Mac, and Unix architectures
- Key components and boot processes
- Filesystem structures and common commands

- **Command Line Essentials**

- Basic Linux & Windows CLI commands
- File and directory operations
- Permissions and ownership management
- Process management and monitoring

- **User & Group Administration**

- Creating, modifying, and deleting users and groups
- Managing permissions and user roles
- Password policies and user account security

- **Patch Management & System Hardening**

- Patch identification and application strategies
- Hardening OS configurations (Linux/Windows)
- Disabling unnecessary services and ports
- Securing remote access (SSH/RDP best practices)

- **Automation of Administrative Tasks**

- Basic scripting (Bash/PowerShell) for automation
- Scheduling tasks (cron jobs / Task Scheduler)
- Logging and auditing automated activities

- **Virtualization Concepts**

- Introduction to virtualization
- Understanding hypervisors (Type 1 and Type 2)
- Overview of virtual machines and containers (e.g., Docker)