

## **1. System Architecture**

- **Determine and configure hardware settings**
- **Boot the system**
- **Change run levels / boot targets and shutdown or reboot system**

## **2. Linux Installation and Package Management**

- **Design hard disk layout**
- **Install a boot manager**
- **Manage shared libraries**
- **Use Debian package management**
- **Use RPM and YUM package management**
- **Linux as a virtualization guest**

## **3. GNU and Unix Commands**

- **Work on the command line**
- **Process text streams using filters**
- **Perform basic file management**
- **Use streams, pipes and redirects**
- **Create, monitor and kill processes**
- **Modify process execution priorities**
- **Search text files using regular expressions**
- **Basic file editing**

## **4. Devices, Linux Filesystems, Filesystem Hierarchy Standard**

- **Create partitions and filesystems**
- **Maintain the integrity of filesystems**
- **Control mounting and unmounting of filesystems**
- **Manage file permissions and ownership**
- **Create and change hard and symbolic links**
- **Find system files and place files in the correct location**

## **5. Shells and Shell Scripting**

- **105.1 Customize and use the shell environment**
- **105.2 Customize or write simple scripts**

## **6. User Interfaces and Desktops**

- **106.1 Install and configure X11**
- **106.2 Graphical Desktops**
- **106.3 Accessibility**

## **7. Administrative Tasks**

- **Manage user and group accounts and related system files**
- **Automate system administration tasks by scheduling jobs**
- **Localisation and internationalisation**

## **8. Networking Fundamentals**

- **Fundamentals of internet protocols**
- **Persistent network configuration**
- **Basic network troubleshooting**
- **Configure client-side DNS**

## **9. Security**

- **Perform security administration tasks**
- **Setup host security**
- **Securing data with encryption**