Red Hat Certified System Administrator (RHCSA)

- What is Linux and RHEL?
- Installation of RHEL 7 in KVM/VirtualBox
- Basic Unix commands - Files and directory handling
- Using vim editor
- Understanding Linux file systems hierarchy
- Manage local Linux users and groups, and local password policies
- File systems Permissions and Group Collaboration
- Using access control lists (ACL)
- Disk Management – fdisk and gdisk
- Manage logical volume management (LVM) storage
- Schedule future Linux tasks
- Control and monitor network services and system daemons using systemd
- Control and troubleshoot the Red Hat Enterprise Linux boot process
- Manage Red Hat Enterprise Linux networking: Configure basic IPv4 settings
- Install and manage software packages from Red Hat and yum package repositories
- Configure and secure OpenSSH service
- Configure a basic local firewall
- Archive files and copy them from one system to another
- Locate and interpret relevant system log files for troubleshooting purposes
- Mounting network file systems: NFS and server message block (SMB) shares from network file servers

Red Hat Certified Engineer (RHCE)

- Control services and daemons: Review how to manage services and the boot-up process using systemctl
- Manage IPv6 networking: Configure and troubleshoot basic IPv6 networking on Red Hat Enterprise Linux systems
- Configure link aggregation: teaming NIC cards
- Control network port security: Permit and reject access to network services using advanced SELinux and firewalld filtering techniques
- Manage DNS for servers: Set and verify correct DNS records for systems and configure secure DNS caching
- Configure email delivery: Relay all email to an SMTP gateway for central delivery
- Provide block-based storage: Provide and use networked iSCSI block devices as remote disks (iSCSI target and initiator)
- Provide file-based storage: Provide NFS exports and SMB file shares to specific systems and users
- Configure MariaDB databases: Provide a MariaDB SQL database for use by programs and database administrators
- Provide Apache HTTPD web service: Configure Apache HTTPD to provide Transport Layer Security (TLS)-enabled websites and virtual hosts

- Write simple shell scripts using Bash
- Bash conditionals and control structures