APPLIED TECHNOLOGY ACADEMY

800.674.3550
Info@AppliedTechAc.com
AppliedTechnologyAcademy.com

Linux System Administrator Training

The Linux Foundation Authorized Training · Applied Technology Academy

This course provides the essential knowledge and hands-on skills required to administer Linux systems in enterprise, cloud, and DevOps environments. It prepares learners to configure, manage, and troubleshoot Linux systems and focuses on practical, real-world administration tasks. Ideal for system administrators upgrading their skills, IT professionals transitioning to Linux roles, and those preparing for the LFCS certification exam.

LEVEL	DURATION	EXPERIENCE	AVERAGE SALARY	LABS
Beginner	**5 Days**	**Linux Fundamentals**	**$120,000**	**Yes**

Course Overview

- Install and configure Linux systems
- Manage users, groups, and system permissions
- Configure devices, file systems, and storage
- Maintain system services, networking, and security
- Manage software packages across major distributions
- Monitor system performance and logs
- Use shell scripting to automate administrative tasks
- Troubleshoot common Linux system issues
- Prepare effectively for the LFCS exam

Course Outline

- **Module 1: Introduction to Linux Administration**
  - Review of Linux distributions and architecture
  - Administrative responsibilities and tools
  - Command-line efficiency and essential utilities
- **Module 2: System Installation & Configuration**
  - Installation procedures and initial setup
  - Disk layout options and bootloaders
  - System startup process and systemd management
- **Module 3: User & Group Administration**
  - Creating, modifying, and deleting users and groups
  - Password policies and account restrictions
  - Managing sudo privileges and access control

800.674.3550
Info@AppliedTechAc.com
AppliedTechnologyAcademy.com

- **Module 4: Permissions, Ownership & Security Controls**
  - File and directory permissions (rwx)
  - Advanced permissions: ACLs, special bits
  - Basic security hardening practices
- **Module 5: Storage, Partitions & File Systems**
  - Creating and managing partitions
  - Formatting and mounting file systems
  - Swap, LVM, and RAID configuration
  - Auto-mounting with fstab
- **Module 6: Package Management**
  - Using package managers (apt, yum, dnf, zypper)
  - Repository configuration and updates
  - Installing, removing, and verifying software
- **Module 7: Process & System Monitoring**
  - Viewing and controlling processes
  - Job scheduling (cron, systemd timers)
  - Resource monitoring with top, htop, sar
- **Module 8: Networking & System Services**
  - Network configuration and troubleshooting
  - Managing services with systemd
  - Firewalls and basic security filtering
- **Module 9: Device Management & Kernel Components**
  - Kernel modules and system configuration
  - Managing devices and udev
  - Sysctl tuning and persistent settings
- **Module 10: Logging & System Maintenance**
  - Understanding system logs and journalctl
  - Log rotation and storage management
  - Backup and restore strategies
- **Module 11: Shell Scripting & Automation**
  - Writing and executing shell scripts
  - Variables, loops, conditionals
  - Automating routine administrative tasks
- **Module 12: Troubleshooting & LFCS Exam Preparation**
  - Diagnosing common system issues
  - Networking, storage, and process troubleshooting

– Practice scenarios aligned with LFCS domains

Intended Audience

- Aspiring Linux system administrators seeking hands-on, practical skills
- IT professionals responsible for managing Linux servers in production environments
- Support technicians transitioning into Linux administration roles
- DevOps, cloud, and cybersecurity professionals who require strong Linux fundamentals
- Students preparing for the Linux Foundation Certified System Administrator (LFCS) exam
- Anyone with basic Linux knowledge wanting deeper administrative experience

Prerequisites

- Basic familiarity with Linux recommended
- Completion of a Linux Fundamentals course or equivalent experience helpful

Follow-On Courses

- Linux Foundation Certified Engineer (LFCE)
- Kubernetes Administrator (CKA)
- Kubernetes for Developers (CKAD)

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.