## **Linux Course Catalog – 30 Days**

Day	Module	<b>Topics Covered</b>
1	Introduction to Linux	Overview of Linux, History of Linux, Linux Distributions, Installing Linux
2-3	Linux File System	Directory Structure, Files and Directories, Navigating the File System, File Permissions
4-5	<b>Basic Linux Commands</b>	pwd, ls, cd, cp, mv, rm, mkdir, touch, cat, more, less
6-7	File Management & Permissions	File Ownership, chmod, chown, chgrp, Understanding File Permissions
<b>8-9</b>	Text Editors	Using Nano and Vim, Editing Files, Searching within Files
10-11	Managing Users & Groups	Creating Users & Groups, User Authentication, Modifying Users, Group Management
12-13	Package Management	Using apt, yum, rpm, dpkg, Installing & Removing Software Packages
14-15	<b>Process Management</b>	Viewing Processes (ps, top, htop), Managing Processes (kill, nice, renice)
16-17	Disk Management	Disk Partitioning, Formatting, Mounting, and Unmounting Partitions, df, du, fdisk, lsblk
18	<b>Networking Basics</b>	IP Addressing, Network Interfaces, ifconfig, ip command, ping, netstat
19	Configuring Network Interfaces	Static and Dynamic IP Configuration, DHCP Client, Network Configuration Files
20-21	System Startup & Services	Boot Process, runlevels, Systemd, Managing Services with systemetl
22	<b>Shell Scripting Basics</b>	Introduction to Shell Scripting, Writing Simple Scripts, Variables, Input/Output
23-24	Advanced Shell Scripting	Conditional Statements, Loops, Functions, Script Debugging
25	Cron Jobs & Automation	Scheduling Tasks with cron, cron syntax, Managing cron jobs
26	Security Basics	User Authentication, sudo, Configuring Firewall (iptables, ufw), SELinux
27	Log Files & System Monitoring	Viewing Log Files (dmesg, /var/log), Using journaletl, Monitoring System Performance
28	Backup & Restore	Backup Tools (rsyne, tar), Automating Backups with cron, Restore Files from Backups
29	Linux File Sharing & Network Services	NFS, Samba, SSH, FTP, SFTP, Setting up a File Server
30	Final Project & Certification	Hands-on Project (e.g., Setting up a Web Server, File Server, or Automating Tasks), Review, Final Exam & Certification