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Learning Style: Virtual Classroom

Technology:

Difficulty: Beginner

Course Duration: 3 Days

Next Course Date: **May 26, 2026**

## Introduction to Linux (TTLX2103)



### About This Course:

Introduction to Linux is a 3-day, hands-on course that provides you with a solid level foundation in essential skills for using any version of Linux. This course focuses on core useful skills that ordinary you might use day to day when working

with Linux.

## **Course Objectives:**

- Basic Linux Operations
- File System Basics
- Wildcards
- File and Directory Permissions
- Working with files
- Executing Programs
- Using find
- Filters and other useful commands
- The vi editor
- Customizing the user environment
- Networking/Communications
- Backups and archiving

## **Audience:**

- This is an introductory-level course, designed for anyone wanting to learn Linux. Attendees should be comfortable working with computers and the command line, but no other specific skills are required to attend.

## **Prerequisites:**

- This is an introductory-level course, designed for anyone wanting to learn Linux. Attendees should be comfortable working with computers and the command line, but no other specific skills are required to attend.

## Course Outline:

### The Design of Linux

- A brief history of Linux
- The Linux design philosophy
- Linux architecture

### Basic Operations

- Logging in and out
- The general form of a Linux command
- Common commands
- Using man pages
- Essential commands

### File System Basics

- The Linux directory structure
- Standard directories
- Relative and absolute pathnames
- Legal file names
- Navigating the filesystem

### Wildcards

- Matching one character
- Matching many characters
- Shortcuts
- Wildcard gotchas
- Wildcards and ls

### File and Directory Permissions

- Viewing permissions
- File permissions
- Directory permissions
- Setting defaults
- Changing permissions

- Keeping data secure

## Working with files

- Viewing contents
- Identifying file contents
- Copying and moving
- Deleting
- Using symbolic links

## Executing Programs

- Redirecting STDOUT
- Redirecting STDERR
- Redirecting STDIN
- Creating pipelines
- Processes attributes
- Listing processes
- Killing processes
- Foreground & background processes

## Using find

- Syntax
- Finding by name, type, or size
- Combining tests
- Finding by size, owner, or timestamps
- Using xargs with find
- Other find options

## Filters and other useful commands

- What is a filter?
- cat: a generic filter
- head and tail
- grep
- sort
- wc
- other interesting filters

## The vi editor

- Why vi?
- Basic vi operations: navigating, adding, deleting
- Advanced operations: buffer management, search and replace, configuration options

## Customizing the user environment

- About shells

- Shell startup files
- Shell variables
- Search path
- Aliases
- Simple shell scripts

## Networking/Communications

- Reading and sending mail
- Remote login
- Remote file transfer
- Other network utilities (ping, ~~finger~~traceroute, etc)

## Backups and archiving

- Checking space used or available
- Creating tar archives
- Viewing and extracting files from archives
- Compression utilities
- Working with windows