Module 1: Structure and procedures of multiuser and multitasking operating systems.

Introduction to interactive systems, multi-tasking and multi-user (UNIX).
History and importance of multi-user.
Different types of shells. Redirect standard output. Redirect standard input.
Piping concept. Concept of meta characters.
UNIX operating foundations.

Module 2: Processes and UNIX operating system commands.

Introduction processes and UNIX operating system commands.
User Management. Command Prompt (Prompt).
Opening and closing sessions. System Information. System errors.
Basic syntax commands.
Administration and file management. Directory administration and management.

Module 3: UNIX operating system performance.

Introduction and processes.
Memory protection.
Interactivity of the system.
Deadlock. Safety and Security.

Module 4: Multiuser and multitasking operating systems derived from UNIX (Linux).

UNIX-derived operating systems.
History and philosophy of GNU / Linux.
LINUX shells.
Programming Shell-Scripts.
Awk programming skills.
Backups. Virtual memory. TCP / IP

Module 5: Multiuser and multitasking operating systems not derived from UNIX (OS / 2).

Working with files and manage them.
Introduction to OS / 2 operating system. Installing OS / 2 operating system.
Structure of OS / 2 operating system.

Process synchronization.
Working with Files.
Communication.
Operating System.

Module 6: Programming interpreter (SHELL-SCRIPT).

Programming of the various shells. Arrays (systems). Tweaks.
Special variables. Read and Set.
Function test.
Redirection, pipes and combination of both.
Eval. Tput.
Menus based on numbers.
Tcp access.