DevOps Learning Path

Day 1 : Saturday 2/8/2025

**Foundation of Agile and DevOps**

Principles of DevOps  
Dev vs Ops culture  
DevOps lifecycle

Agile manifesto, principles  
Scrum, Kanban, XP  
Roles: Scrum Master, Product Owner

Day 2 : Monday 4/8/2025

Introduction to SCRUM  
Scrum Events (Sprint, Planning, Review, Retrospective)  
Scrum Artifacts (Product Backlog, Sprint Backlog, Increment)

Day 2 : Evening 6:30 PM – 7:00 PM Discuss the challenges and review the progress.

Day 3 : Version Control with Git

Git Fundamentals  
 Version control : Centralized vs Distributed  
 Understand Branches, Commits, Staging Area (Index) and GitIgnore   
 Working with Git : Local repository (init, add, commit & Branch commands)

Day 4: Remote Git Repositories

Overview of GitHub (Only repositories)  
 Pull and Push a GitHub repository from Local system  
 GitHub Pull Requests  
 GitHub Forks

Day 4 : Evening 6:30 – 7:00 PM Discuss the challenges and review the progress.

Day 5 : Overview of Jenkins

Overview CI/CD Workflows  
 Introduction to Jenkins  
 Jenkins Installation options: Portable WAR & Windows Installer  
 Jenkins Job ( Freestyle project )  
 Explore Jenkins home directory: jobs, logs, configs and plugins

Day 6 : Building with Jenkins

Integration with Git and Maven  
 Building a sample Java application (Java/Spring boot) with Jenkins job (Freestyle)  
 Job “build” triggers   
 Building “War” or “Jar” and publishing the package for later deployments

Day 7 : Morning : 10:00 – 10:30 Discuss and challenges and review the progress

Day 7 : 11:00 to 5:00 PM   
Internal Session on Building & Deploying application with Jenkins, Git and GitHub