

CI/CD (Jenkins) Training

Table of Contents

Duration - 3 Days

Pre- Training Udemy Course Link:

<https://synechron.udemy.com/course/devops-and-continuous-integration-with-jenkins-pipelines/>

Post- Training Udemy Course Link:

<https://synechron.udemy.com/course/jenkins-from-zero-to-hero/>

Pre-requisites:

Basic understanding of Unix/Linux and DevOps concepts

Course Objectives:

To understand the power continuous integration

Course Outline:

Module 1: Introduction to Continuous Integration

- What is CI?
- Why CI?
- Benefits
- Best Practices
- Difference between Continuous Integration/Delivery/Deployment

Module 2: Overview of Jenkins

- Introduction to Jenkins
- Understanding Jenkins Architecture
- Installing and Configuring Jenkins
- Running Jenkins on Secured port
- Types of Jobs in Jenkins
- Role of Jenkins in SDLC
- Jenkins BCP

Module 3: Configuring Jobs in Jenkins

- General Configuration
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

Module 4: Commonly Used Plugins

- Security Plugin/Authentication/Authorization Plugins
- Docker
- Folders
- Pipelines
- Build Pipelines
- GIT
- Build Number
- Extended Choice
- Multi Branch Plugin

- Maven Release Plug-in
- GitHub MultiBranch Plugin
- Conditional Plugins
- Approval Plugin
- Repo Plugin
- Configuring Slave/Nodes in Jenkins

Module 5: Global Configurations

- Deep dive into Global Configurations in Jenkins

Module 6: Jenkins Integration with Other Tools

- GitHub Integration
- Ansible Integration
- Docker Integration
- Kubernetes Integration
- AWS Integration

Module 7: Jenkins Build as a Code

- Jenkins file and DSL
- Stages
- Parallel
- Nodes
- Dockernodes
- Cloud Providers Integration

Module 8: Installing Jenkins Agents

- Installing Permanent Agent in Linux Server
- Installing Permanent Agent in Windows Server
- Running Dynamic Jenkins Agents using Amazon EC2
- Running Jenkins Agents using Kubernetes