

# Jenkins – Fundamentals

## Description

Jenkins is an open source automation server which enables developers around the world to reliably build, test, and deploy their software.

This course will help you to become an expert in Jenkins by mastering Build Pipeline, Reporting, Email & Build plugins, Secure Jenkins, Tomcat 7 and other related concepts

## Course Content

### Module 1: Course Introduction

- Course Objectives & Overview
- Introduction to Continuous Integration
- Introduction to Jenkins

### Module 2: Jenkins Installation Process

- Installation of Jenkins - Part 1 - Install Java
- Installation of Jenkins - Part 2
- Advanced Jenkins Installation
- Install Jenkins on Tomcat

### Module 3 : Getting Started with Jenkins

- Jenkins Dashboard & Configurations
- Creating Users & Granting Access in Jenkins
- Role Based Strategy for Users
- Creating our first Jenkins Job

### Module 4 : Continuous Integration with Jenkins

- Jenkins Integration with Git using Poll SCM
- Jenkins Integration with Git using Webhooks
- Installation of Maven
- Setting up a Maven Project
- Jenkins Integration with Maven
- Introduction & Installation of SonarQube
- Code Analysis with SonarQube
- Jenkins Integration with SonarQube
- Sending Email Notifications from Jenkins
- Jenkins Integration with Selenium and TestNG
- Jenkins Integration with Tomcat for Deployment

### Module 5 : Jenkins Pipelines

- Introduction To Pipelines
- Setting up Delivery Pipeline
- Setting up Build Pipeline
- Introduction to Jenkins Pipeline

- Setting Up Scripted Jenkins Pipeline
- Setting up Declarative Jenkins Pipeline

## **Documentation**

- Digital courseware included

## **Participant profiles**

- Anyone who is looking at Jenkins for implementing Continuous Integration & Continuous Delivery in their projects or organization
- Anyone who wants to automate their software delivery process through the complete life-cycle from code check in to deployment

## **Prerequisites**

- Basic understanding of Software Development Lifecycle & the processes involved
- Access to a PC or Mac with internet connection to try out the working samples on the course

## **Objectives**

- Understanding the concepts of DevOps, Continuous Integration, Continuous Delivery & Continuous Deployment
- Understanding how Jenkins fits perfectly as the CI/CD server
- Learning about the basics of a Jenkins job & its configuration options
- Source code repository
- Code Quality
- Automated Build, Test & Deployments
- Jenkins pipeline

## **Niveau**

Fondamental

## **Classroom Registration Price (CHF)**

1600

## **Virtual Classroom Registration Price (CHF)**

1500

## **Duration (in Days)**

2

## **Reference**

JSK-FO