

# JENKINS STANDARD COURSE

Duration: Hours

## TARGET AUDIENCE

## PRE-REQUISITES

## COURSE CONTENTS

### 1. CI/CD Concepts

- Continuous Integration and Continuous Delivery

### 2. Installing and Configuring Jenkins

- Installing Jenkins
- The Dashboard
- User Management and Security
- Adding a Jenkins Slave (Windows & Linux)
- Getting Set Up in GitHub
- Plugin Manager

### 3. Projects

- Freestyle Project Configuration
- Source Code Management and the Git Plugin
- Build Triggers and Git Hooks
- Workspace Environment Variables
- Parameterized Projects
- Upstream/Downstream Projects and the Parameterized Trigger Plugin
- Folders
- Views

### 4. Pipelines

- Our Java Pipeline Project
- Docker Install
- Installing and Configuring Ant

- The Jenkinsfile o Categories of pipeline
- Configuring and Running a Pipeline
- Artifacts and Fingerprints

## 5. Testing With Jenkins

- About Testing
- Unit Testing with JUnit and Ant
- Deploying to Apache
- Functional Testing
- Testing Code in Docker Containers with Jenkins Pipelines
- Generating JUNIT, MSTEST, CORBUTERA, CLOVER reports

## 6. Pipeline Enhancements o Multi-branch Pipelines and Code Promotion

- Tagging
- Notifications
- Shared Pipeline Libraries
- The DevOps Pipeline

## 7. Advanced Jenkins Administration o The Jenkins CLI

- The Jenkins REST API
- Setting Up a Jenkins Master with Docker
- Setting up a Jenkins Master with Docker

## 8. Summary of use cases

- Projects will both .net , java & angular
- Will be shown integration with third party tools
- All setup will be on cloud

## RELATED COURSES

Course Name	Duration	Notes