



Jenkins Automation Server Essentials

- 2 Day Course
- Lecture and Lab
- Every course includes the opportunity to earn a Jenkins Automation Server Essentials certification from Alta3 Research.

Course Overview

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This intensive 2-day course is designed to provide participants with a comprehensive understanding of Jenkins, a leading automation server. It covers everything from the fundamentals to advanced integration techniques. Participants will learn how to automate tasks, manage software lifecycles, and integrate Jenkins with various tools and platforms. By the end of the course, attendees will have the skills to set up and manage robust CI/CD pipelines, scale Jenkins to meet organizational needs, and leverage AI for enhanced configuration and troubleshooting.

Review this course online at <https://www.alta3.com/courses/jenkins>

Who Should Attend

- DevOps Engineers
- Software Developers
- Telecommunications Professionals
- Architects
- Quality Assurance & Site Reliability Professionals

What You'll Learn

- Automate basic freestyle projects
- Jenkins Pipelines and Groovy Programming
- Software lifecycle management with Jenkins
- Popular plugins
- Scaling options
- Integrating Jenkins with Git and GitHub (as well as other Software Control Management platforms)
- Triggering Jenkins with Webhooks
- Deploying into Docker and Kubernetes
- CI / CD with Jenkins
- AI LLM prompt engineering for relevant configuration snippets and solutions

Outline




AI LLM Toolkit

-  Lecture + Lab: Large Language Model toolkit for AI Solution Assistance




Getting Started

-  Lecture + Lab: Git and GitHub
-  Lecture + Lab: Git Branching
-  Lecture + Lab: Dockerizing A Python Flask App or Creating A Container Image





Basics

-  Lecture + Lab: Deploying Jenkins with Docker
-  Lecture + Lab: Jenkins Dashboard
-  Lecture + Lab: Freestyle Projects and Workspaces
-  Lecture + Lab: Triggering Jenkins Builds with WebHooks
-  Lecture + Lab: Installing Jenkins Plugins




Scripting

-  Lecture + Lab: Docker Build Agents
-  Lecture + Lab: Python Builds
-  Lecture + Lab: Ansible Builds

CI / CD

-  Lecture + Lab: Continuous Integration
-  Lecture + Lab: Creating Jenkins Scripted Pipelines
-  Lecture + Lab: Declarative vs Scripted Pipelines
-  Lecture + Lab: Jenkins REST API

Administration

-  Lecture + Lab: Backing Up Jenkins
-  Lecture + Lab: Security and Credential Management
-  Lecture + Lab: Configuration as Code

Deploy and Configure

-  Lecture + Lab: Build Agents
-  Lecture + Lab: Freestyle Terraform and Ansible Builds

Certification

- Jenkins Automation Server Essentials - Certification Project