Testing and CI/CD for ERP Code Deployments Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Testing and CI/CD for ERP Code Deployments Training Course is designed to empower software professionals with the knowledge and skills necessary for implementing continuous integration, continuous delivery, and automated testing in ERP (Enterprise Resource Planning) system environments. With the growing need for faster and more reliable ERP code deployments, this course emphasizes the critical role of test automation, CI/CD pipelines, and DevOps practices in ensuring the seamless and consistent delivery of software. Participants will gain hands-on experience in managing complex ERP system updates, ensuring minimal downtime, and maintaining high software quality throughout the development lifecycle.

As ERP systems become more intricate, it is crucial for organizations to adapt modern practices such as automated testing frameworks, cloud-native deployments, and version control in their ERP code deployment workflows. This course offers an in-depth exploration of key tools and techniques used in the ERP development lifecycle, covering Jenkins, Git, Docker, and Kubernetes, among others. By the end of this training, professionals will be able to set up automated testing environments, deploy CI/CD pipelines, and ensure robust integration testing across ERP platforms like SAP, Oracle, and Microsoft Dynamics.

Programme Curriculum

Testing and CI/CD for ERP Code Deployments Training Course

Introduction

Testing and CI/CD for ERP Code Deployments Training Course is designed to empower software professionals with the knowledge and skills necessary for implementing continuous integration, continuous delivery, and automated testing in ERP (Enterprise Resource Planning) system environments. With the growing need for faster and more reliable ERP code deployments, this course emphasizes the critical role of test automation,

CI/CD pipelines, and DevOps practices in ensuring the seamless and consistent delivery of software. Participants will gain hands-on experience in managing complex ERP system updates, ensuring minimal downtime, and maintaining high software quality throughout the development lifecycle.

As ERP systems become more intricate, it is crucial for organizations to adapt modern practices such as automated testing frameworks, cloud-native deployments, and version control in their ERP code deployment workflows. This course offers an in-depth exploration of key tools and techniques used in the ERP development lifecycle, covering Jenkins, Git, Docker, and Kubernetes, among others. By the end of this training, professionals will be able to set up automated testing environments, deploy CI/CD pipelines, and ensure robust integration testing across ERP platforms like SAP, Oracle, and Microsoft Dynamics.

Course Duration

5 days

Course Objectives

1. Understand the fundamentals of CI/CD pipelines and how they apply to ERP code deployments.
2. Gain expertise in implementing automated testing strategies for ERP systems.
3. Explore the role of continuous integration in optimizing ERP deployment cycles.
4. Learn to configure and use Jenkins for automated builds and deployments.
5. Master version control systems like Git to manage ERP code efficiently.
6. Develop proficiency in containerization using Docker for ERP deployment processes.
7. Implement unit testing, integration testing, and end-to-end testing for ERP systems.
8. Understand automated regression testing to ensure stable ERP code releases.
9. Gain practical knowledge of cloud deployment strategies for ERP applications.
10. Leverage monitoring tools and feedback loops to ensure the reliability of ERP systems in production.
11. Understand the impact of microservices architecture on ERP deployments and CI/CD.
12. Learn best practices for scalable and fault-tolerant ERP systems.
13. Develop expertise in DevOps practices for managing ERP code in dynamic environments.

Target Audience

1. ERP Developers working on ERP system code deployments.
2. DevOps Engineers interested in enhancing CI/CD practices for ERP systems.
3. Software Engineers focused on automating testing for enterprise applications.
4. Test Automation Engineers looking to expand knowledge in ERP environments.
5. System Administrators managing infrastructure for ERP systems.
6. IT Managers overseeing ERP implementation and deployment strategies.
7. QA Professionals involved in ensuring software quality in ERP deployments.
8. Product Managers seeking to understand deployment and testing cycles for ERP solutions.

Course Modules

Module 1: Introduction to CI/CD and Testing in ERP Systems

- Definition and significance of CI/CD in ERP deployments.
- Key concepts in automated testing for ERP systems.
- Benefits of continuous integration in enterprise environments.
- How test automation frameworks can improve ERP software quality.
- Case study: Transitioning a legacy ERP system to CI/CD.

Module 2: Version Control and Repository Management

- The role of Git in ERP code management.
- Best practices for branching strategies in ERP development.
- Integrating version control with CI/CD pipelines.
- Handling merge conflicts in ERP development environments.
- Case study: Managing version control in a multi-developer ERP team.

Module 3: Automated Testing Strategies for ERP Deployments

- Setting up unit tests for ERP modules.
- Creating integration tests for ERP workflows.
- Using automated UI testing in ERP applications.
- Best practices for test-driven development (TDD) in ERP systems.
- Case study: Automating tests for ERP system updates.

Module 4: Building CI/CD Pipelines with Jenkins

- Overview of Jenkins and its role in CI/CD for ERP systems.
- Setting up automated build pipelines for ERP code.
- Integrating test automation into Jenkins pipelines.
- Strategies for continuous deployment in an ERP environment.
- Case study: Implementing a Jenkins pipeline for an ERP code deployment.

Module 5: Containerization and Orchestration with Docker & Kubernetes

- Introduction to containerization for ERP deployments.
- Benefits of using Docker for ERP development.
- Deploying ERP code with Kubernetes for scalability.
- Continuous delivery with Docker containers.
- Case study: Scaling an ERP deployment using Kubernetes.

Module 6: Monitoring and Feedback Loops in CI/CD Pipelines

- Setting up monitoring systems for ERP deployments.
- Key metrics for evaluating ERP system performance.
- The role of feedback loops in continuous improvement.
- Troubleshooting and error management in production environments.
- Case study: Using monitoring tools to improve ERP system stability.

Module 7: Cloud Deployment for ERP Code

- Advantages of cloud deployment for ERP systems.
- Best practices for setting up cloud CI/CD pipelines.
- Integrating cloud services like AWS, Azure, or Google Cloud into ERP deployments.
- Handling ERP data migration during cloud adoption.
- Case study: Migrating an on-premise ERP system to the cloud.

Module 8: DevOps Practices for Efficient ERP Code Deployments

- Principles of DevOps in ERP environments.
- Automating the ERP code deployment lifecycle.

- Integrating DevOps tools with ERP platforms.
- Collaborating between development and operations teams for smoother deployments.
- Case study: Streamlining ERP deployments using DevOps tools and practices.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com