



MFE-IT

Reference: 2B/EN/JENK

CI/CD DevOps Training Course

Automate Your Software Lifecycle with Jenkins and Docker

Duration: 4 Days | Hours: 28 h

Remote · Sessions guaranteed from 1 registrant · 60% hands-on practice

DESCRIPTION

This DevOps training course shows you how to automate every stage of the software lifecycle, from commit to deployment, using Jenkins and Docker — two robust and widely used open-source technologies. You will learn how to design efficient, containerised and reproducible pipelines suitable for all environments: development, staging and production.

In agile and DevOps environments, CI/CD (Continuous Integration and Deployment) is a key requirement for software performance, and this course gives you the structured methodology to implement it end to end.

LEARNING OBJECTIVES

By the end of this training course, participants will be able to:

- Understand the fundamental concepts of continuous integration and deployment
- Install, configure and use Jenkins as an automation engine
- Containerise your applications with Docker for reproducible builds
- Create and run declarative Jenkins pipelines (Jenkinsfile)
- Integrate testing, linting, builds and deployments
- Secure, monitor and maintain your CI/CD jobs over the long term

PREREQUISITES

- Proficiency with command lines (Linux or Windows)
- Basic knowledge of software development (Java, JS, PHP or others)
- Basic knowledge of Docker (image structure, containers)

Because each participant is unique, a personalised interview is systematically organised in advance with our expert to design a training programme perfectly aligned with their objectives, level and professional challenges.

TARGET AUDIENCE

Developers, DevOps engineers, QA engineers and tech leads who want to industrialise their delivery workflows.

DETAILED PROGRAMME

The training alternates between theoretical input and hands-on practice (approximately 60% of the time). Modules are built around practical exercises based on real-world business use cases.

Module 1 – Introduction to CI/CD and Jenkins

- CI/CD concepts and DevOps mindset
- Jenkins installation and architecture
- Job interface and essential plugins

Module 2 – Jenkins and pipeline management

- Freestyle jobs versus Jenkinsfile
- Declarative pipeline syntax: build, test, notifications
- Managing artefacts and post-build actions

Module 3 – Docker in the pipeline

- Building Docker images inside Jenkins
- Running jobs in containers
- Managing volumes, secrets and registries

Module 4 – Security, monitoring and errors

- Users, credentials and role-based access
- Logs, automatic restart and build archiving
- Pipeline auditing and incident analysis

Module 5 – Full integration and automation

- End-to-end automation: SCM trigger to production deploy
- Multi-branch pipelines and shared libraries
- Notifications via email, Slack and Teams

Module 6 – Best practices and maintenance

- Pipeline versioning and code review
- Branch and feature management
- Job cleanup and observability

TEACHING METHODS

Format and Delivery

The training is delivered remotely via an interactive virtual classroom. It can also be delivered on-site, with content customised to match the needs of your professional project. The theory/practice split is approximately 40%/60%.

MFE-IT Ultra-Personalised Format

Each session accommodates between 1 and 3 participants, ensuring highly individualised support. A preliminary interview allows us to tailor the content to each participant's profile. Inter-company sessions are guaranteed from just 1 registrant (except in cases of force majeure).

Skills Assessment

Throughout the training, the trainer assesses participant progress through multiple-choice questions, role-playing exercises and hands-on work. At the end, a certificate of achievement is issued to each participant.

Post-Training Support

For one month following the training, each participant can contact MFE-IT trainers with questions about implementing acquired knowledge. A response is provided by email or telephone within 48 working hours.

Accessibility

MFE-IT is committed to welcoming people with disabilities. Contact: contact@mfe-it.com.

PRACTICAL INFORMATION

Trainer Resources

- Structured demonstrations aligned with the detailed programme
- Exercise briefs and solutions throughout the training
- A ready-to-use technical environment for practical workshops
- Trainer validation of acquired knowledge at the end of each workshop
- Digital reference documents

Certification and Validation

At the end of the training, a certificate is sent by email specifying the objectives, nature, duration and assessment results. A completion certificate can also be provided on request.

Benefits for Participants

- Train from your workplace or home, with no travel required
- Benefit from an expert trainer-consultant on the subject
- Enjoy an ultra-personalised format (1 to 3 participants)
- Continue training even in the event of unforeseen circumstances

Benefits for the Organisation

- Optimise the training budget by reducing travel and accommodation costs
- Offer quality training to all employees, regardless of location
- Reduce absence time linked to travel
- Support team upskilling in all contexts