

# Training Course Content

## Test Engineering in DevOps

Duration : 3 days

Languages : EN & FR

The DevOps Test Engineer is the person responsible for software testing in a DevOps environment. This function requires a very precise vision of what distinguishes DevOps testing from other types of tests. This training will perfectly alternate theory and put into practice. It will initially address the cultural and team spirit aspects of DevOps testing engineering. Next will be a review of test strategies, test frameworks and tools, automation and test management, and analysis of their results.

### Learning Objectives

- Understand the basic concepts of DevOps, and DevOps testing
- Understand the position and role of the Test Consultant in a DevOps environment
- Understand what differentiates DevOps testing from the "traditional" test
- Know and master the toolchain, including automation and continuous integration

### Pre-requisites

General knowledge of Software testing.

### Audience

This training is ideal for all professionals involved in defining and deploying a DevOps environment testing strategy such as:

- Project managers
- Testers (Test Manager, Analyst, Automation ...)
- Quality Manager
- Software engineer
- DevOps Engineer

## Course Content

1. **Reminder about DevOps**
2. **DevOps Testing**
3. **Test culture and organization in DevOps mode**
  - How to build a DevOps Testing culture
  - Culture test and organization in DevOps mode
4. **DevOps Test Engineering – Strategies**
  - Definition of the test strategy
  - Reminders about test fundamentals
  - DevOps Risk Management
  - The documentation of the DevOps test strategy
5. **DevOps Testing - Developments Part**
  - The fundamentals of test automation for DevOps
  - Automated unit testing
  - Automated integration tests
  - Automated GUI tests
  - Summary on the "Test First" methodologies
  - Industrialization of the continuous cycle
  - Implementing continuous integration with Jenkins
  - Exploration
  - The "Feature toggles"
6. **DevOps Testing - Operations Part**
  - DevOps practices OPS side
  - Operating issues
  - Industrialization of the continuous cycle
  - Automated infrastructure management
  - Industrialization of the continuous cycle Testing side

## Practical exercises

This training consists of practical exercises to illustrate the subjects discussed and provides trainees with the opportunity to learn through practice.

## Trainer skills

Our experts who run our training courses or those we organize with a partner are specialists in the subjects covered. They are validated by our internal teams, both in terms of business knowledge and pedagogy, for each course they teach. They have at least five to ten years of experience in their field and hold or have held positions covering business topics.