

## Test engineering in DevOps

### Software Testing in a DevOps environment

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.

#### Détails

- **Code** : TEST-DEVOPS-EN
- **Durée** : 3 jours ( 21 heures )

#### Public

- DevOps Engineer
- Project managers
- Quality Manager
- Software engineer
- Testers

#### Pré-requis

- General knowledge of software testing.

#### Objectifs

- 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

#### Programme

##### Reminder about DevOps

##### DevOps Testing

##### Test culture and organization in DevOps mode

- How to build a DevOps Testing culture
- Culture test and organization in DevOps mode

##### DevOps Test Engineering – Strategies

- Definition of the test strategy
- Reminders about test fundamentals
- DevOps Risk Management
- The documentation of the DevOps test strategy

##### 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 »

##### 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

#### Modalités

- **Type d'action** :Acquisition des connaissances
- **Moyens de la formation** :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- **Modalités pédagogiques** :Exposés – Cas pratiques – Synthèse
- **Validation** :Exercices de validation – Attestation de stages

