Course : Industrialize functional testing

Practical course - 2d - 14h00 - Ref. IFO
Price : 1460 € E.T.

★★★★⯪ 4,4 / 5

The industrialization of functional testing is a major factor in improving application quality. This training course presents the best practices for achieving a good level of industrialization. It also presents tools for managing and automating tests.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Calculate the profitability of a test industrialization project
- ✓ Create functional test plans
- ✓ Automate these manual functional tests using test robots
- ✓ Automatically feed data to the test robot
- ✓ Run these tests as part of the continuous integration process

Intended audience

Test managers, managers, validation/functional qualification test engineers (MOE or MOA).

Prerequisites

Good knowledge of software engineering processes, including testing processes.

Course schedule

1 Introduction to functional testing

- Functional test definitions.
- The types of tests concerned.
- Industrialization of functional testing.
- Reminder of the functional test process.
- Tool chains for functional testing.
- Test industry, TRA, Offshoring and STaaS (Software Testing as a Service).
- Costs and benefits of functional testing. Profitability models.

Case study
Calculation of a project's profitability based on various assumptions.

PARTICIPANTS

Test managers, managers, validation/functional qualification test engineers (MOE or MOA).

PREREQUISITES

Good knowledge of software engineering processes, including testing processes.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

2 Functional test management

- Requirements and traceability managers.
- Test repository managers.
- Bi-traceability of requirements/specifications/tests.
- Preparation of test platforms.
- Preparation of test data.
- Writing test cases.
- Creation of functional test plans.
- Execution and follow-up of test results.

Hands-on work
Implemented functional tests on an Open Source Web application. Use of the Testlink test repository.

3 Test automation

- Automation tools.
- Automation by test robot, functional API.
- Functional abstraction layer.
- Graphics component map.
- Component recognition techniques.
- Separation of logic and data from automated tests.
- Publication of robot tests and test results in the test repository.
- Test maturity and automation.

Hands-on work
Automate manual functional tests using test robots (Selenium…). Test management of a rich application with a functional API.

4 Advanced practices

- Communication techniques between tools.
- Specification by example.
- Model testing and model-based testing.
- Test and test script generators.
- Frameworks for unit testing and functional qualification testing.
- Integration into continuous integration chains.

Hands-on work
Specification by example with FitNesse. Automatic data feed to the robot. Test generation and continuous integration chain.

5 Review and summary

- Retour d'expérience chiffré à travers un projet de test fonctionnel qui a échoué.
- Quantified feedback from a successful functional test project.

Dates and locations

REMOTE CLASS
2026 : 22 June, 30 Nov.

PARIS LA DÉFENSE
2026 : 22 June, 30 Nov.