

# Training Course Content

## ISTQB Certified Test Analyst Advanced Level

Duration : 4 days

Languages : EN & FR

This training is aimed at people directly involved in the design of technical tests, their execution and collaboration with the Test Manager. The Technical Test Analyst's mission is to implement several techniques to analyze the internal structure of the system and evaluate it in terms of performance, safety, reliability...

### Learning Objectives

- Contribute to the development of a plan to integrate automated testing within the testing process
- Evaluate tools and technology for automation best fit to each project and organization
- Create an approach and methodology for building a test automation architecture (TAA)
- Design and develop (new or modified) test automation solutions that meet the business needs
- Enable the transition of testing from a manual to an automated approach
- Create automated test reporting and metrics collection
- Manage and optimize testing assets to facilitate maintainability and address evolving (test) systems

### Pre-requisites

Certification at the ISTQB foundation level is required. Some practical experience working on software development projects or as a test specialist. Professionals who can read and understand code

### Audience

This training is ideal for professionals in software testing (project management, designers, developers, test practitioners) who wish to specialize in technical and nonfunctional tests.

## Course Content

### 1. Risk-Based Testing

- Learn the generic risk factors that the Technical Test Analyst needs to consider

### 2. Structure-Based Testing

- Condition Testing
- Decision Condition Testing
- Modified Condition / Decision Coverage (MC / DC) Testing
- Multiple Condition Testing
- Path Testing
- API Testing
- Selecting a structure-based Technique

### 3. Analytical Techniques

- Use static analysis to detect potential security, maintainability and testability defects in the code
- Mitigate risks in code and software architecture

### 4. Quality characteristics for Technical Testing

- Design high-level test cases for safety, performance and reliability. Be able to assist the Test Manager in defining test strategies. Including quality of maintainability, portability and resource utilization in a test strategy

### 5. Reviews

- Analyse an architectural design and identify problems according to a checklist
- Analyse a section of (pseudo-)code and identify problems according to a checklist

### 6. Test tools and Automation

- Concepts of test tools. The categories of test tools. The automation of tests determined by keywords
- Performance testing tools

### 7. Passage of the Certification

- Revision for Advanced Level Certification
- White review and commented correction

## 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.