

Training Course Content

ISTQB Certified Technical Test Analyst Advanced Level

Duration : 3 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 analyse the internal structure of the system and evaluate it in terms of performance, safety, reliability etc.

Learning Objectives

- Recognize and classify the main risks related to the performance, security, reliability, portability and maintainability of software systems
- Select and implement structural design techniques to ensure that the tests provide, and adequate level of confidence based on code and design coverage
- Recognize risks in code and architecture and create parts of the test plan to mitigate these risks with dynamic analysis
- Propose improvements for the security, maintainability and testability of the code using static analysis
- Present the costs and benefits to be expected from the introduction of certain types of test automation

Pre-requisites

Certification ISTQB level foundation is required. Experience with test projects on a software system design project. Professionals who can read and understand code.

Audience

Anyone involved in the software testing process such as:

- Test Team Leaders
- Non-functional testers
- Project managers
- Professionals in software testing (project management, designers, developers, test practitioners) who wish to specialize in technical and non-functional 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. Include 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

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.