# ISTQB® Advanced Level, Technical Test Analyst (CTAL-TA), Certification

Hands-on course of 3 days - 21h Ref.: TQB - Price 2024: CHF2 490 (excl. taxes)

# TEACHING METHODS

Illustrations through concrete cases, feedback and exercises to prepare for the certification test throughout training.

#### **CERTIFICATION**

Official ISTQB® CTAL certification

# THE PROGRAMME

last updated: 01/2018

# 1) The Technical Test Analyst's Tasks in Risk-Based Testing

- General introduction of risk analysis and testing.
- Risk Identification.
- Risk Assessment.
- Risk Mitigation.

Exercise: Review question, exam preparation.

#### 2) Structure-Based Testing

- General introduction of 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.

Exercise: Review question, exam preparation.

## 3) Analytical Techniques

- General introduction of analytical techniques.
- Static Analysis.
- Control Flow Analysis. Data Flow Analysis.
- Using Static Analysis for Improving Maintainability. Call Graphs.
- Dynamic Analysis.
- Overview. Detecting Memory Leaks.
- Detecting Wild Pointers. Analysis of Performance.

Exercise: Review question, exam preparation.

# 4) Quality Characteristics for Technical Testing

- General introduction.
- General Planning Issues.
- Security Testing.
- Reliability Testing.
- Performance Testing.
- Resource Utilization.

#### 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, handson work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

# TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
  A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee

### TERMS AND DEADLINES

attended the entire session.

Registration must be completed 24 hours before the start of the training.

# ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@ORSYS.fr to review your request and its feasibility.

- Maintainability Testing.
- Portability Testing.

Exercise: Review question, exam preparation.

# 5) Reviews

- General introduction of review.
- Using Checklists in Reviews.
- Architectural Reviews.
- Code Reviews.

Exercise: Review question, exam preparation.

## 6) Test Tools and Automation

- Integration and Information Interchange Between Tools.
- Defining the Test Automation Project.
- Selecting the Automation Approach.
- Modeling Business Processes for Automation.
- Specific Test Tools.
- Fault Seeding/Fault Injection Tools.
- Performance Testing Tools. Tools for Web-Based Testing.
- Tools to Support Model-Based Testing. Component Testing and Build Tools.

Exercise: Review question, exam preparation.

#### 7) Certification

- Revision on the main themes approached in formation.
- Practice test to involve itself.
- Installation of the examination: 2 hours, the last day on 3PM, by the GASQ selected by the ISTQB.

# **DATES**

REMOTE CLASS

2025 : 15 Jan, 16 Jun, 18 Aug, 08

Dec