

## PROGRAMA ISTQB CTAL – TM

As a test manager, you take on responsibility for the test process conducted during software development. You plan the necessary tests, assess them and handle fault management. With the internationally recognized **ISTQB® Certified Tester Advanced Level - Test Manager (CTAL-TM)** certification, you will demonstrate that you have the skills and knowledge of the testing tools that are used to automate processes. In order to be certified you must pass the ISTQB® Certified Tester Advanced Level - Test Manager exam.

In order to take the ISTQB® Certified Tester Advanced Level - Test Manager exam you will need the ISTQB® Certified Tester Foundation Level certificate. You should have at least 18 months of practical experience in the field of software testing.

### Course Modules and Lessons for ISTQB® Certified Tester Advanced Level Test Manager

#### **1. Testing Process – 420 mins.**

- 1.1 Introduction
  - 1.2 Test Planning, Monitoring and Control
    - 1.2.1 Test Planning
    - 1.2.2 Test Monitoring and Control
- 1.3 Test Analysis
- 1.4 Test Design
- 1.5 Test Implementation
- 1.6 Test Execution
- 1.7 Evaluating Exit Criteria and Reporting
- 1.8 Test Closure Activities

#### **2. Test Management – 750 mins.**

- 2.1 Introduction
- 2.2 Test Management in Context
  - 2.2.1 Understanding Testing Stakeholders
  - 2.2.2 Additional Software Development Lifecycle Activities and Work Products
  - 2.2.3 Alignment of Test Activities and Other Lifecycle Activities
  - 2.2.4 Managing Non-Functional Testing
  - 2.2.5 Managing Experience-Based Testing
- 2.3 Risk-Based Testing and Other Approaches for Test Prioritization and Effort Allocation
  - 2.3.1 Risk-Based Testing
  - 2.3.2 Risk-Based Testing Techniques
  - 2.3.3 Other Techniques for Test Selection
  - 2.3.4 Test Prioritization and Effort Allocation in the Test Process

## 2.4 Test Documentation and Other Work Products

- 2.4.1 Test Policy
- 2.4.2 Test Strategy
- 2.4.3 Master Test Plan
- 2.4.4 Level Test Plan
- 2.4.5 Project Risk Management
- 2.4.6 Other Test Work Products

## 2.5 Test Estimation

## 2.6 Defining and Using Test Metrics

## 2.7 Business Value of Testing

## 2.8 Distributed, Outsourced, and Insourced Testing

## 2.9 Managing the Application of Industry Standards

### **3. Reviews – 180 mins.**

#### 3.1 Introduction

#### 3.2 Management Reviews and Audits

#### 3.3 Managing Reviews

#### 3.4 Metrics for Reviews

#### 3.5 Managing Formal Reviews

### **4. Defect Management – 150 mins**

#### 4.1 Introduction

#### 4.2 The Defect Lifecycle and the Software Development Lifecycle

##### 4.2.1 Defect Workflow and States

##### 4.2.2 Managing Invalid and Duplicate Defect Reports

##### 4.2.3 Cross-Functional Defect Management

#### 4.3 Defect Report Information

#### 4.4 Assessing Process Capability with Defect Report Information

### **5. Improving the Testing Process – 135 mins**

#### 5.1 Introduction

#### 5.2 Test Improvement Process

##### 5.2.1 Introduction to Process Improvement

##### 5.2.2 Types of Process Improvement

#### 5.3 Improving the Testing Process

#### 5.4 Improving the Testing Process with TMMi

#### 5.5 Improving the Testing Process with TPI Next

#### 5.6 Improving the Testing Process with CTP

#### 5.7 Improving the Testing Process with STEP

### **6. Test Tools and Automation – 135 min**

#### 6.1 Introduction

#### 6.2 Tool Selection

##### 6.2.1 Open-Source Tools

##### 6.2.2 Custom Tools

##### 6.2.3 Return on Investment (ROI)

##### 6.2.4 Selection Process

#### 6.3 Tool Lifecycle

#### 6.4 Tool Metrics

## **7. People Skills – Team Composition – 210 mins.**

- 7.1 Introduction
- 7.2 Individual Skills
- 7.3 Test Team Dynamics
- 7.4 Fitting Testing Within an Organization
- 7.5 Motivation
- 7.6 Communication

## **8. References and Mock up Exams**