



## Advanced Tester Certification—Test Manager



- Integrate testing into your software development process
- Establish a realistic test approach and strategy
- Understand the Test Manager’s role in reviews
- Plan, estimate, and schedule the testing effort
- Dynamically monitor, manage, and report testing activities
- Understand the Test Manager’s role in defect management
- Plan and implement test automation
- Measure test effectiveness and project progress
- Evaluate and improve your test process
- Develop new skills to lead your test team

The ISTQB® *Advanced Tester Certification—Test Manager* training course expands on the test techniques and methods introduced in the ISTQB Foundation certification course and addresses those areas of the ISTQB advanced syllabus specifically related to the Advanced Test Management certification.

The course focuses on the key areas that are vital for successful test management: the foundations of software testing, test management, standards and test improvement processes, and people skills.

Specific topics covered include testing as part of the software development lifecycle, metrics, test documentation, risk analysis, estimation, test management issues, test automation, process improvement models, individual skills for testers and managers, team dynamics, leadership, and motivation.

This course is filled with hands-on exercises to help you practice the methods and techniques taught in the course. This course covers the syllabus for the Advanced Test Management certification and will help you prepare for the exam.

### Who Should Attend?

- Individuals who have taken the ISTQB Certified Tester—Foundation Level training and wish to expand their knowledge and skills into more advanced areas
- Individuals who have received the ISTQB Foundation Level certification, have met the criteria for taking the advanced certification exams, and wish to prepare for those exams. For more information regarding the criteria for taking the advanced examinations, go to [www.ASTQB.org](http://www.ASTQB.org) [1].
- Anyone wishing to learn more about advanced testing topics

### Pre-Qualification for the Advanced Certification Exam

In order to be eligible to take any of the Certified Tester—Advanced Level (CTAL) exams, potential examinees must:

- Submit proof of Certified Tester—Foundation Level (CTFL) certification
- Establish an account in the [ASTQB WebAssessor](#) [2]
- While ASTQB no longer requires students to document a minimum of 3 years' experience, it is still strongly recommended that students have relevant experience and an understanding of the Advanced level learning objectives.

CTAL exams are not given at the end of class. After pre-qualification is completed, students receive an ASTQB exam voucher good for one year to use at an [exam center of their choice](#) [3]. To learn more about Advanced Tester Certification, or to schedule a personal certification planning consultation with one of our Training Advocates, [contact our Client Support team](#) [4].

### Exam Retakes

The ASTQB (American Software Testing Qualifications Board) is currently offering free retakes of an ISTQB Advanced Level exam for professionals who meet certain criteria. To learn more about this offer, visit [ASTQB.org](http://ASTQB.org) [5].

#### Course Outline:

1.1 Fundamental Test Process

1.2.1 Test Planning

Activity timing

1.2.2 Test Monitoring and Control

1.3 Test Analysis

Advantages of Detailed Test Conditions

2.9 Managing the Application of Industry Standards (continued)

Sample ISO standards

IEEE

Example of national standard

Domain-Specific standards

CMMI – Capability Maturity Model

Disadvantages of Detailed Test Conditions

When Are Detailed Test Conditions Effective?

1.3 Test Analysis Exercise

1.4 Test Design

Mapping test cases to requirements

Inventory tracking matrix

1.4 Test Design Exercise

1.5 Test Implementation

Sequence of Test Execution

Disadvantages of Early Test Implementation

Advantages of Early Test Implementation

1.5 Test Implementation Exercise

1.6 Test Execution

1.6 Test Execution Exercise

1.7 Evaluating Exit Criteria and Reporting

1.8 Test Closure Activities

Test Completion

Test Artifact Handover

Lessons Learned

1.8 Test Closure Activities Exercise

2.2 Test Management in Context

Understanding Stakeholders

Who Are the Stakeholders?

Other SDLC Activities and Products

Alignment of Test Activities

Sequential Models

Additional Test Levels

Elements of a Test Level

Levels of Testing Within the Lifecycle

Managing Non-Functional Testing

Integrating Non-Functional Tests into SDLC

Benefits and Challenges of Experience-Based Testing

Managing Experience-Based Testing

2.2 Stakeholder Exercise

2.3 Risk-Based Testing

Quality Risks

Integration

PMI, PRINCE2 and ITIL

Considerations when using standards

2.9 Managing the Application of Industry Standards Example 1

3.2 Management Reviews and Audits

Key Characteristics

Audits

Key Characteristics of Audits

3.3 Managing Reviews

Formulating a Review Strategy

Addressing Reviews During Test Planning

Measuring the Effectiveness of Reviews

3.3 Managing Reviews Exercise

3.4 Metrics for Reviews

Metrics for Product Evaluation

Metrics for Process Evaluation

3.4 Metrics for Reviews Exercise

3.5 Managing Formal Reviews

Characteristics of a Formal Reviews

Fulfillment of Prerequisites

4.2 Defect Lifecycle and SDLC

Economics of test and failure

Defect Workflow and States

Cross-Functional Defect Management

4.2 Defect Lifecycle and SDLC Exercise

4.3 Defect Report Information

Defect Data

Standards for Defect Reporting

ISO 9126

IEEE 829

IEEE 1044

Orthogonal defect classification

4.3 Defect Report Information Exercise

4.4 Assessing Process Capability

Using Defects for Process Improvement

5.2 Test Improvement Process

Why test process improvement models?

Risk Identification	Process assessment
Categorization of Risk	Process capability determination
Light-weight Risk-Based Testing Techniques	Process improvement
Heavy-weight Risk-Based Testing Techniques	Process assessment
Measuring Success of Risk-Based Testing	Types of process improvement models
Techniques for Test Selection	5.3 Improving the Test Process
2.3 Risk-Based Testing Exercise	Test Improvement Models
2.4 Test Documentation	Improving the Testing Process
Test Documentation	Change process steps: IDEAL
Test policy	5.3 Improving the Test Process Exercise
Test strategy	5.4 Improving the Test Process with TMMi
Master test plan	5.5 Improving the Test Process with TPI Next
Level test plan	5.6 Improving the Test Process with CTP
Test Policy	5.7 Improving the Test Process with STEP
Project Risk Management	6.0 Test tools and automation
Examples of Project Risk Mitigation	6.2 Tool Selection
Managing Project Risk	6.3 Tool Lifecycle
2.4 Test Documentation Exercise	6.3 Tool Metrics
2.5 Test Estimation	7.0 People skills
Factors that influence test estimation	7.2 Individual Skills
How good is our industry (at estimating)?	Individual skills – Testers
2.5 Test Estimation Exercise	Individual Skills – User View
2.6 Defining and Using Test Metrics	Individual Skills – Software Development Process
What makes a good measure?	Individual Skills – Test Techniques
Metrics for test closure	Individual Skills – For Test Managers
Using metrics	Individual Skills – Interpersonal Skills
Using metrics for test control	Building the Perfect Team
A sample tester’s dashboard	Skills Assessment
<i>Exercise – Metrics</i>	7.2 Individual Skills Exercise
2.6 Defining and Using Test Metrics Exercise	7.3 Test Team Dynamics
2.7 Business Value of Testing	Test Team Dynamics – New Staff Members
Quantitative value of testing	Technical Skills-Hard Skills
Economics of test and failure	Technical Skills-Soft Skills
Qualitative value of testing	7.4 Testing within an Organization
Cost of (poor) quality	7.5 Motivation
2.7 Business Value of Testing Exercise	Motivation and Morale
2.8 Distributed, Outsourced, and Insourced	Motivation and Metrics

Testing

7.6 Communications

2.9 Managing the Application of Industry Standards

Sources of standards

International standards

**Class Schedule:**

Sign-In/Registration 7:30 - 8:30 a.m.

Morning Session 8:30 a.m. - 12:00 p.m.

Lunch 12:00 - 1:00 p.m.

Afternoon Session 1:00 - 5:00 p.m.

*Times represent the typical daily schedule. Please confirm your schedule at registration.*

**Course Fee Includes:**

- Tuition
- Course notebook
- Letter of completion

**Upcoming Dates:**

Your Location

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