

# **Certified Tester**

## **Foundation Level**

# Overview

Version 0.3, October 24<sup>th</sup>, 2013

International Software Testing Qualifications Board



Copyright Notice This document may be copied in its entirety, or extracts made, if the source is acknowledged.

Int Softwar Qualification T∩B®).

Copyright © International Software Testing Qualifications Board (hereinafter called ISTQB®).

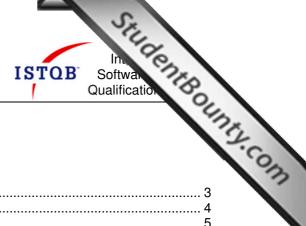
Foundation Level Working Group:

Thomas Müller, 2013



## **Revision History**

| Version | Date                            | Remarks   |
|---------|---------------------------------|---|
| 0.1     | September 20 <sup>th</sup> 2013 | Initial version for motion in Portugal 2013                       |
| 0.2     | September 28 <sup>th</sup> 2013 | Minor updates in text and footer                                  |
| 0.3     | October 24 <sup>th</sup> 2013   | Review feedbacks considered – clarifications and figure 1 updated |
| 1.0     | November 29 <sup>th</sup> 2013  | GA approved version   |



## Table of Contents

|              | Revision History                  |   |  |  |  |
|--------------|-----------------------------------|---|--|--|--|
|              | wledgements                       |   |  |  |  |
| 1. Int       | roduction to the Foundation Level | 6 |  |  |  |
| 1.1          | Career Paths for Testers          | 6 |  |  |  |
| 1.2          | Intended Audience                 | 6 |  |  |  |
| 1.3          | Learning objectives               | 6 |  |  |  |
| 1.4          | Entry requirements                | 6 |  |  |  |
| 1.5          | Structure and Course Duration     | 6 |  |  |  |
| 2. <b>Ov</b> | verview of Foundation Level       | 8 |  |  |  |
|              | 2 Business Outcomes               | 8 |  |  |  |
| 3. Ab        | breviations1                      | 0 |  |  |  |
| 4. <b>Re</b> | ferences1                         | 1 |  |  |  |
| 4.1          | Trademarks1                       | 1 |  |  |  |
| 4.2          | Documents and Web-Sites           | 1 |  |  |  |

## Acknowledgements

In Softwar Qualification This document was produced by the International Software Testing Qualifications Board Foundation Level Working Group:

ISTOB

Thomas Mueller, Klaus Olsen

The authors thank the review team and all National Boards for their suggestions and input.

The following persons participated in the reviewing, commenting and balloting of this document (alphabetical order):

Foundation Level WG 2011 to 2013

This document was formally released by the General Assembly of ISTQB® on November 19<sup>th</sup> 2013.

### 1. Introduction to the Foundation Level

StudentBounty.com This overview document is intended for anyone with an interest in the ISTQB Foundation Level who wants a high-level introduction to its leading principles and an overview of the Foundation Level Svllabus.

ISTOB

Softwa Qualification

The Foundation Level certifications will be examined with three major task descriptions in mind, each representing basic responsibilities and expectations within an organization. In any organization, responsibilities and associated tasks may be split between different individuals or covered by a single individual.

In this document the Foundation Level Syllabus is described in summary form and the Business Outcomes are stated. These provide a specific statement of what can be expected from a person who achieves the Foundation Level, and will particularly benefit companies that are considering the development of specific skills at this level.

### 1.1 Career Paths for Testers

The ISTQB scheme provides support for the definition of career paths for professional testers by offering a 3-tiered certification scheme starting with Foundation Level and continuing with Advanced and Expert Level.

A person with the Foundation Level certification can then extend his broad understanding of testing to the Advanced Level, with certifications for both test managers and test analysts. Test analyst skills may be further extended into the role of technical test analyst.

The Advanced Level then establishes a platform from which further skills and knowledge may be acquired at the Expert Level. After achieving experience as a test manager, for example, a person may choose to develop their testing career further by acquiring Expert Level certifications in the subjects of test management and improving the test process.

### 1.2 Intended Audience

The Foundation Level gualification is aimed at IT or business people who would like to start a career as software tester, or a person with test experience who wants to demonstrate his testing knowledge and skills.

#### 1.3 Learning objectives

In general all parts of the Foundation Level syllabus are examinable at a K1 level. That is, the candidate will recognize, remember and recall a term or concept stated in the syllabus.

The relevant Learning Objectives at K2, K3 and K4 levels are shown at the beginning of each chapter within the Foundation Level syllabus.

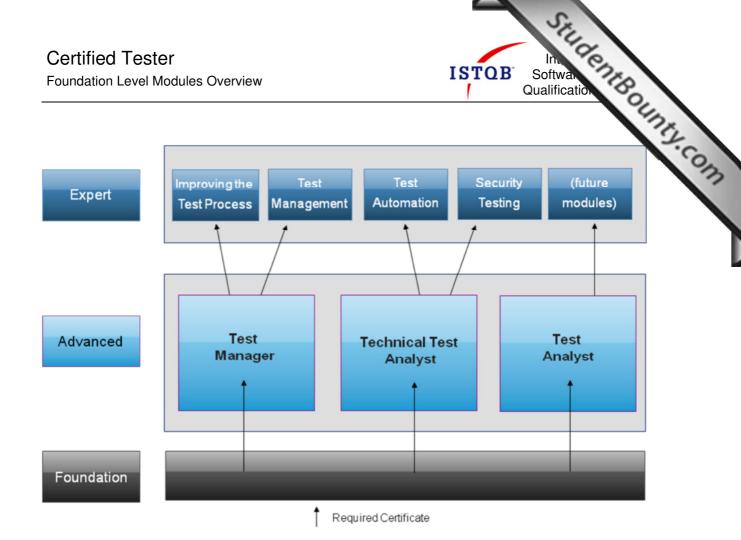
### 1.4 Entry requirements

To receive Foundation Level certification it is recommended that candidates have 6 months of IT experience.

### 1.5 Structure and Course Duration

The Foundation Level syllabus is built on 6 chapters covering the basic knowledge and skills a tester requires.

The following figure shows the structure of the Foundation Level and its relationship to the Advanced and Expert Levels.





## 2. Overview of Foundation Level

#### 2.1 Content

Chapter 1: Fundamentals of Testing

- The tester learns the basic terminology related to testing, the reasons why testing is required, what objectives are and the principles of successful testing.
- The tester understands the test process, the major activities and artifacts.

Chapter 2: Testing Throughout the Software Life Cycle

- The tester learns the test process itself and how it interacts with software development and maintenance life cycles.
- The tester learns about test levels, test types and impact analysis when working with maintenance testing.

Chapter 3: Static Techniques

• The tester learns the various static techniques of testing without executing the software, such as review and tool supported analysis of software

Chapter 4: Test Design Techniques

 Based on the tester's understanding of the test process and its interaction with various software development life cycles, the tester is able to use systematic and heuristic techniques to derive test cases from other software artifacts and the software itself. Both behavioral and structural techniques are covered.

Chapter 5: Test Management

- Test management is covered from a skills perspective, focusing on test execution and defect reporting and handling.
- The tester learns what shall be included in the various test documentation artifacts, such as test plans, designs, and reports.

Chapter 6: Tool Support for Testing

• The tester knows that testing can benefit from tools in various fields such as requirement management, configuration management, test management as well as dynamic coverage, test execution and performance testing.

#### 2.2 Business Outcomes

This section lists the Business Outcomes to be expected of a candidate who has achieved the Foundation Level certification.

A Foundation Tester can...

| FL1 | Use a common language for efficient and effective communication.<br>Understand established concepts, the fundamental test process, test management principles, test strategies/approaches, risks and principles to support test objectives.                       |  |
|-----|---|--|
| FL2 | Autonomously analyze and prioritize both functional and non-functional specifications, such as performance efficiency and usability, design tests using established techniques for functional tests at all test levels for systems of small to medium complexity. |  |
| FL3 | Interpret and execute tests according to agreed test specifications and analyze and report on the results of tests independently.   |  |
| FL4 | Write and communicate clear and understandable incident reports.  |  |
| FL5 | Contribute in reviews of the test basis and test artifacts for systems of small to medium complexity.   |  |

StudentBounts.com FL6 Assist in the selection and implementation process of testing tools for various testing activities.

Softwar Qualification

ISTOB

In general, the Foundation Tester has acquired the skills necessary to enable further development at Advanced level for Advanced Test Manager, Advanced Analyst and Advanced Technical Tester.

| Certified Tes<br>Foundation Level                         | s <b>ter</b><br>Modules Overview | In Softwar<br>Qualification |
|---|----------------------------------|-----------------------------|
| 3. Abbrevi  |                                  | LINE COM                    |
| Abbreviation  | Meaning                          |                             |
| BO  | Business Outcome                 |                             |
| ISTQB International Software Testing Qualifications Board |                                  | lifications Board           |
| LO Learning Objective                                     |                                  |                             |
| TA Test Analyst   |                                  |                             |
| TM Test Manager   |                                  |                             |
| TTA   | Technical Test Analyst           |                             |

#### References 4.

#### 4.1 Trademarks

The following registered trademarks and service marks are used in this document:

ISTQB® is a registered trademark of the International Software Testing Qualifications Board

#### 4.2 Documents and Web-Sites Identifier Reference [ISTQB-Web] Web site of the International Software Testing Qualifications Board. Refer to this website for the latest ISTQB Glossary and syllabi. (www.istqb.org) XXXXX

StudentBounty.com

Softwar Qualification

ISTOB