

# ISTQB® CTCL

## Improving the Test Process

The Expert Level extends the knowledge and experience obtained at the Advanced Level by providing in-depth, practically-oriented certifications in a range of different testing subjects. With Expert Level ISTQB® offers career paths for testers with clearly defined business outcomes.

To obtain Expert Level certification, candidates must have:

- The Foundation Certificate;
- An Advanced Certificate depending on the Expert Module desired;
- Passed the Expert Level Exam;
- At least 5 years of practical testing experience;
- At least 2 years of industry experience in the specific Expert Level topic;

Note that the experience criteria may also be attained after taking the exam. It is recommended, however, that the candidate has gained this practical experience before taking the exam. If a non-public exam is to be taken, completion of Expert Level course is mandatory.

### CONTENTS

Part 1 - Assessing Test Processes	
<b>Context of Improvement</b>	<b>Analytical based Improvement</b>
Why improve?	Casual Analysis
What can be Improved?	GQM Approach
Views of Quality	Measures, Metrics & Indicators
Generic Improvement Process (Deming, IDEAL)	
<b>Model based Improvement</b>	<b>Selecting the Approach</b>
SW Models (CMMI, ISO 155504)	Selection of Test Process Improvement
Test Process Models (TPI NEXT, TMMi)	
Test Content Models (CTP, STEP)	<b>Process of Improvement</b>
	Initiating & Diagnosing the Situation
Part 2 - Implementing Test Process Improvement	
<b>Process for Improvement</b>	<b>Managing Change</b>
Establishing a Test Improvement Approach	Change Management Process
Implementing Test Improvement	Human Factors
Learning from the Improvement Program	
<b>Organizational Aspects</b>	<b>Critical Success Factors</b>
Organization	Key Success Factors
Roles	Setting an Improvement Culture
Skills of the Test Process Improver	<b>Adapting to Different Life Cycle Models</b>
	Adapting to Different Life Cycle Models

## EXAM STRUCTURE

This exam comprises three individual parts, which require three separate examinations. The three structures are the same and are outlined below:

\*\* 88 points or more;

\*\*\* Only for participants that take the exam not in their spoken language.



## BUSINESS OUTCOMES

- Lead programs for improving the testing process within an organization or project and can identify and manage critical success factors;
- Take appropriate business-driven decisions on how to approach improvement to the test process;
- Assess the current status of a test process, propose step-wise improvements and show how these are linked to achieving business goals;
- Set up a strategic policy for improving the testing process and implement that policy;
- Analyze specific problems with the test process and propose effective solutions;
- Create a test improvement plan which meets business objectives;
- Develop organizational concepts for improvement of the test process which include required roles, skills and organizational structure;
- Establish a standard process for implementing improvement to the test process within an organization;
- Manage the introduction of changes to the test process, including co-operation with the sponsors of improvements;
- Understand and effectively manage the human issues associated with assessing the test process and implementing necessary changes.

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