



# ISTQB® CTAL Technical Test Analyst

The Advanced Level qualification is aimed at people who have achieved an advanced point in their careers in software testing. This includes people in roles such as testers, test analysts, test engineers, test consultants, test managers, user acceptance testers and software developers.

This Advanced Level qualification is also appropriate for anyone who wants a deeper understanding of software testing, such as project managers, quality managers, software development managers, business analysts, IT directors and management consultants.

To receive Advanced Level certification, candidates must hold the Foundation Certificate and satisfy the Exam Board which examines them that they have sufficient practical experience to be considered Advanced Level qualified.

To get the Advanced Level certification, candidates must hold the Foundation Certificate and have sufficient practical experience.

## CONTENTS

The Technical Test Analyst's Tasks in Risk-Based Testing	White-Box Test Techniques	Static and Dynamic Analysis	Quality Characteristics for Technical Testing	Reviews	Test tools & Automation
Introduction	Introduction	Introduction	General Planning Issues	Technical Test Analyst Task in Reviews	Defining the Test automation Project
Risk-Based Testing Tasks	Statement Testing	Static Analysis	Security Testing	Using Checklists in Reviews	Specific Test Tools
	Decision Testing	Dynamic Analysis	Reliability Testing		
	Modified Condition Testing		Performance Efficiency Testing		
	Multiple Condition Testing		Portability Testing		
	Basis Path Testing		Compatibility Testing		
	API Testing		Operational Profiles		
	Selecting a White-Box Test Technique				

## EXAM STRUCTURE

\* 49 points or more

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

\*\*\* Each correct answer has a value of 1 point



## BUSINESS OUTCOMES

- Recognize and classify the typical risks associated with the performance, security, reliability, portability and maintainability of software systems.
- Provide technical elements to the planning, design and execution of tests for mitigating performance, security, reliability, portability and maintainability risks;
- Select and apply appropriate white-box test techniques to ensure that tests provide an adequate level of confidence, based on design coverage;
- Effectively participate in reviews with developers and software architects applying knowledge of typical defects in the code and architecture;
- Improve the quality characteristics of code and architecture by making use of different analysis techniques;
- Outline the costs and benefits to be expected from introducing particular types of test automation.
- Select appropriate tools to automate technical testing tasks;
- Understand the technical issues and concepts in applying test automation.

For more information, please contact: [rui.cardoso@pstqb.pt](mailto:rui.cardoso@pstqb.pt)