

# ISTQB Advanced Test Analyst

## Overview

This course will provide an understanding of testing issues that goes beyond the ISTQB Foundation level giving participants the knowledge and skills required to become an Advanced Test Analyst. This four day course leads to the ISTQB Advanced Test Analyst Certificate. The course focuses on testing topics including testing activities within different lifecycle models, specification-based, defect-based and experienced-based test techniques, test documentation, usability testing, reviews, defect classification and tool support.

## Duration

4 days

## Learning Method

Candidates will be given exercises, practice exams and learning aids for the ISTQB Advanced Test Analyst course to highlight key aspects of the Advanced Level syllabus to assist the student in understanding the concepts and methods presented.

This course will provide the delegate with the necessary knowledge and skills to sit the ISTQB Advanced Test Analyst Certificate multiple choice exam. Please note that the exam is not included in the course, and will have to be taken at a later stage. Exams can be booked directly with the ANZTB.

## Who will benefit from this course?

This 4-day course is most appropriate for Testers, Test Analysts, Test Engineers, Test Consultants, Test Managers, User Acceptance Testers, Software Developers and anyone wishing to gain the ISTQB Advanced Level Test Analyst Certificate.

The Advanced Level certificates are 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.

## Prerequisites for this course

Delegates wishing to take the ISTQB Advanced Test Analyst Certificate exam must hold the ISTQB/ISEB Foundation Certificate. If you wish to sit the course without taking the exam, there are no prerequisites.

## What can you expect to gain from this course?

At the end of the course, you will be able to:

- Perform the appropriate testing activities based on the software development lifecycle being used.
- Determine the proper prioritization of the testing activities based on the information provided by the risk analysis.
- Select and apply appropriate testing techniques to ensure that tests provide an adequate level of confidence, based on defined coverage criteria.
- Provide the appropriate level of documentation relevant to the testing activities.
- Determine the appropriate types of functional testing to be performed.
- Assume responsibility for the usability testing for a given project.
- Effectively participate in formal and informal reviews with stakeholders, applying knowledge of typical mistakes made in work products.

- Design and implement a defect classification scheme.
- Apply tools to support an efficient testing process.

## Course Content

### Testing Process

A Test Analyst should understand the importance of involvement throughout the test process, with particular focus on the role and contribution of the Test Analyst, and how those align with the roles of the Test Manager and Technical Test Analyst. The Test Analyst's tasks of test analysis and design are described. This includes determining the appropriate uses for concrete and logical test cases as well as defining the pre-conditions and criteria used for starting test execution and determining the status of test completion criteria. The impact of different lifecycle models is a central aspect to these tasks.

### Test Management

A Test Analyst should understand the purpose and expected contribution toward the project metrics. A Test Analyst should understand how to prioritize on the basis of risks and can schedule business domain-based tests appropriately. This includes understanding the risk assessment impact on test case selection, test coverage and test data tasks.

### Test Techniques

Testing techniques belong to the core competencies of the Test Analyst. Specification-based and defect- and experience-based techniques are covered. The specification-based techniques introduced at the Foundation level are developed further. These include equivalence partitioning, boundary value analysis, decision tables, state transition testing and use case testing. Additional specification-based techniques introduced include classification tree testing, use of orthogonal arrays, pairwise testing, domain analysis and user stories. Defect-based techniques, exploratory testing and the use of defect taxonomies are additional techniques covered in the area of defect- and experience-based techniques. A Test Analyst should understand how to select the best technique for a given testing situation as well as how to effectively mix techniques to achieve the best testing result.

### Testing Software Quality Characteristics

The specific software quality characteristics that apply to the Test Analyst are covered in this section. These include the functional areas of accuracy, suitability and interoperability as well as the non-functional areas of usability and accessibility. A Test Analyst should understand how to approach these areas and the testing techniques that can be applied.

### Reviews

The activities of the Test Analyst focus on using checklists to identify defects in use cases and in requirements specifications from a tester's perspective. In addition, the Test Analyst learns how to present problems found in a review meeting. Several sample checklists are supplied to help guide review sessions for various work products.

### Defect Management

Test Analysts should understand how to define defect classification values to be used in a defect management system and how to apply this classification to defects found. A discussion of the importance of capturing, refining and using root cause information for process improvement is included in this section. Test Analyst should know how to perform preliminary root cause analysis to help provide good classification information for each reported defect.



### **Test Tools**

This short chapter focuses on the tools and automation issues which are relevant to the Test Analyst. This includes building awareness of business process modelling tools and knowledge of the interactions between the tools typically used by a Test Analyst.

### **Related Courses**

ISTQB Foundation Certificate in Software Testing