

ISTQB Advanced Level Certificate in Software Testing

– Advanced Test Manager Module

Course Introduction

This three day course follows on from the ISTQB Advanced Core Module and leads on to the Advanced Test Manager Certificate. The course focuses specifically on test management issues such as test estimation, monitoring and control, test documentation, process improvement, metrics, measures and people skills. Candidates will be given exercises, practice exams and learning aids to help them attain the ISTQB Advanced Test Manager qualification. This can be taken on its own if the ISTQB Advanced Test Manager qualification is not required.

The accredited material used in the course is used under licence from Grove Consultants. Sopra Group is accredited as a training provider for the ISTQB Advanced Test Manager and the Advanced Test Analyst certificates.

Course Objectives

To provide an understanding of software test management that goes beyond the ISTQB Foundation level. It provides test managers with a good level of knowledge that enables analysis of situations in order to present practical solutions.

The information gained on the course provides a framework for test managers to build upon within their organisations. Spreadsheets, templates and utilities will be provided enabling managers to be more efficient and effective within their organisations.

Who Will Benefit?

This 3-day course is appropriate for test managers, test team leaders, development managers, project managers and anyone wishing to gain the ISTQB Advanced Level Test Manager certificate.

Prerequisites

Delegates wishing to take the ISTQB Advanced Test Manager Certificate must hold the ISTQB/ISEB Foundation Certificate and have completed the ISTQB Advanced Level Core Module with either Sopra Group or Grove Consultants. If you wish to sit the course without taking the exam, there are no prerequisites.

Skills Gained

- Understand the various lifecycles and how to effectively apply them
- Create a firm foundation for the success of testing in your organisation
- Estimate, plan, monitor and control testing in any project
- Understand how to manage distributed, outsourced and insourced test resources
- Understand and apply test improvement models

Course Content

Basic Aspects of Software Testing

This section will build upon those aspects introduced in the “core” module. The different testing lifecycles will be explored providing a detailed understanding of how to implement the most appropriate lifecycle. Specific systems, metrics and measures will be explained allowing relevant testing strategies to be produced.

Test Management

– Test Management Documentation

This section explains the differences between a test policy, test strategy, master test plan and level test plan. Examples of different strategies are shown that could be used to meet defined policies.

– Test Plan Documentation Templates

This section describes the content of a test plan (master and level) according to IEEE 829. We shall provide test plan templates and explain how they can be adapted depending on the organisation, standards and formality of the project.

– Test Estimation

Many factors affect the estimates we produce for testing and this session will highlight considerations when estimating testing. Ten different estimation techniques are shown and how to communicate this information to management.

– Scheduling Test Planning

This section explains the importance of test planning and highlights the benefits of iterative test planning.

Test Progress Monitoring & Control – we monitor testing to establish our project goals and delegates will understand different metrics to collect and their significance when creating test reports.

– Business Value of Testing

Testing needs to deliver value to any project and benefits need to be understood by managements. This session shows how testing can be measured in terms of value and efficiency.

– Distributed, Outsourced and Insourced Testing

Clear channels of communication and trust are needed regardless of location. However, test teams based across multiple locations encounter further challenges. Some of these differences are detailed in this section and the impact if these difficulties are not addressed.

– Failure Mode and Effect Analysis (FMEA)

FMEA is a very structured approach to understanding risk. Delegates will gain an understanding and experience of using this technique and assess the model's use in their organisation.

– Test Management Issues

This section identifies test management issues for safety critical, systems of systems and showing the use and benefits of the Exploratory testing approach as well as other issues such as tackling non-functional testing.

Standards and Test Improvement Process

There are many standards and improvement models to highlight areas of change and become more effective and efficient with testing. This section highlights different sources and their usefulness; followed by various test improvement models such as Test Maturity Model (TMM), Systematic Test and Evaluation Process (STEP), Critical Testing Processes (CTP) and Test Process Improvement (TPI).

People Skills – Team Composition

This session looks at the skills of a tester and different ways to motivate test team members. We consider factors when identifying skills needed for an exiting team and how test team dynamics can affect productivity. Finally we show different organisational structures for testing and the importance of independent test teams.

The Exam

This course will provide the delegate with the necessary knowledge and skills to sit the ISTQB Advanced Test Manager Certificate multiple choice exam. Delegates will be given the opportunity to sit the examination on the morning after the course.

Course Structure

The ISTQB Advanced Level Qualification is divided into three streams: Test Manager, Test Analyst and Technical Test Analyst. We have taken out the concepts that relate to all three streams into a two day "Core" module. The Core module must be completed by anyone wanting to attain the ISTQB Advanced Level Test Management Certificate.

