Certified Tester
Specialist Syllabus Overview

Foundation Level

Gambling Industry Tester

Version 2019

International Software Testing Qualifications Board

Revision History

Version	Date	Remarks
0.1	04 April 2018	Initial version
0.2	20 August 2018	Updates after beta review
2019	18 March 2019	Technical Review performed by Gary Mogyorodi

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Acknowledgements

1. Introduction to the Foundation Level Specialist Scheme

This overview document is intended for anyone with an interest in the ISTQB® Foundation Level Specialist Scheme who wants an overview of and a high-level introduction into the leading principles of the individual specialist syllabi.

From time to time, the ISTQB® will update this document to reflect any additional specialist certifications that shall be introduced for the Foundation Level, or to reflect major changes in existing ones. Publications of the updated document will be available on the ISTQB® website.

The ISTQB® Foundation and Advanced Level syllabi have been defined and have been on the market for some time. New topics emerge due to technology and methodology changes in the market which often are brought into the ISTQB® program as new Expert Level syllabi. However, not all topics are suited for the Expert Level. For this reason, the specialist syllabi are established at the Foundation Level to expand the ISTQB® program to incorporate new or updated knowledge. New specialist syllabi shall be discussed and introduced by the ISTQB® periodically. Specialist syllabi may be established at the Advanced Level as well, but that is beyond the scope of this document.

The following Foundation Level Specialist syllabus has been released:
   □ Gambling Industry Tester Specialist

In this document, the Foundation Level Gambling Industry Tester Specialist Syllabus is summarized, and the associated Business Outcomes are stated. The Business Outcomes communicate what can be expected from a person who achieves a Foundation Level Gambling Industry Tester Specialist Certification and will outline the benefits for companies that are considering the development of specific testing skills at this level.

2. Introduction to Foundation Level Gambling Industry Tester Specialist Certification

The certification for the Foundation Level Gambling Industry Tester Specialist Certificate is designed for professionals who are working within the gambling industry. It is also for professionals who are planning to start working within the gambling industry in the near future or are working within companies that plan to do so, The certification provides an advantage for those who would like to know the required gambling industry activities, roles, methods, and methodologies specific to their role.

2.1 Intended Audience

The Foundation Level Gambling Industry Tester Specialist Certificate qualification is aimed at four main groups of professionals:

1. Professionals who have achieved in-depth testing experience in traditional methods and would like to get a Foundation Level Gambling Industry Tester Specialist Certificate.

2. Junior professional testers who are just starting in the testing profession, have received the Foundation Level certificate, and would like to know more about the tester's role in a Gambling Industry environment.

3. Professionals who are relatively new to testing and are required to implement test approaches, methods and techniques in their day to day job in Gambling Industry projects.   These professionals include people who are in roles such as testers, test analysts, test engineers, test consultants, test managers, user acceptance testers, and software developers.

4. This Foundation Level Gambling Industry Tester Specialist certification may also be appropriate for anyone who wants a deeper understanding of software testing in the gambling industry, such as project managers, quality managers, software development managers, business analysts, IT directors, and management consultants.

2.2 Career Paths for Testers

Building on the Foundation Level, the Gambling Industry Tester Specialist Certificate supports the definition of career paths for professional testers. A person with the Gambling Industry Tester Specialist certificate has extended the broad understanding of testing acquired at the Foundation Level to enable him or her to work effectively as a professional tester in a Gambling Industry project.

People possessing an ISTQB® the Foundation Level Gambling Industry Tester Specialist Certificate may use the Certified Tester Foundation Level acronym CTFL-GT.

2.3 Learning Objectives

In general, the Foundation Level syllabus is examinable at a K1 level, i.e., the candidate will recognize, remember and recall terms and concepts stated in the Foundation Level syllabus.

In addition, all Foundation Level syllabus learning objectives are examinable at the same K- level in a specialist exam.

That said, each specialist exam focuses on the learning objectives defined in that specialist syllabus. The relevant learning objectives at K1, and K2 levels are provided at the beginning of each chapter within each specialist syllabus.

2.4 Entry Requirements

To be able to participate in the Foundation Level Gambling Industry Tester Specialist exam, candidates must have obtained the ISTQB® Foundation Level certificate.

2.5 Structure and Course Duration

The Foundation Level Gambling Industry Tester Specialist Certificate syllabus has no shared or common elements with the Foundation Level syllabus.

Chapter 1: 215 minutes Introduction to the Gambling Industry
Chapter 2: 90 minutes Understand the Gambling Industry Ecosystems
Chapter 3: 435 minutes Testing in the Gambling Industry

The syllabi must be taught in the following minimum number of days:

Syllabus	Days
Baseline: Foundation	3
Gambling Industry Tester Specialist	2

The following figure shows the Gambling Industry Tester Specialist within the Specialist Scheme and its relationship to the Foundation Level.
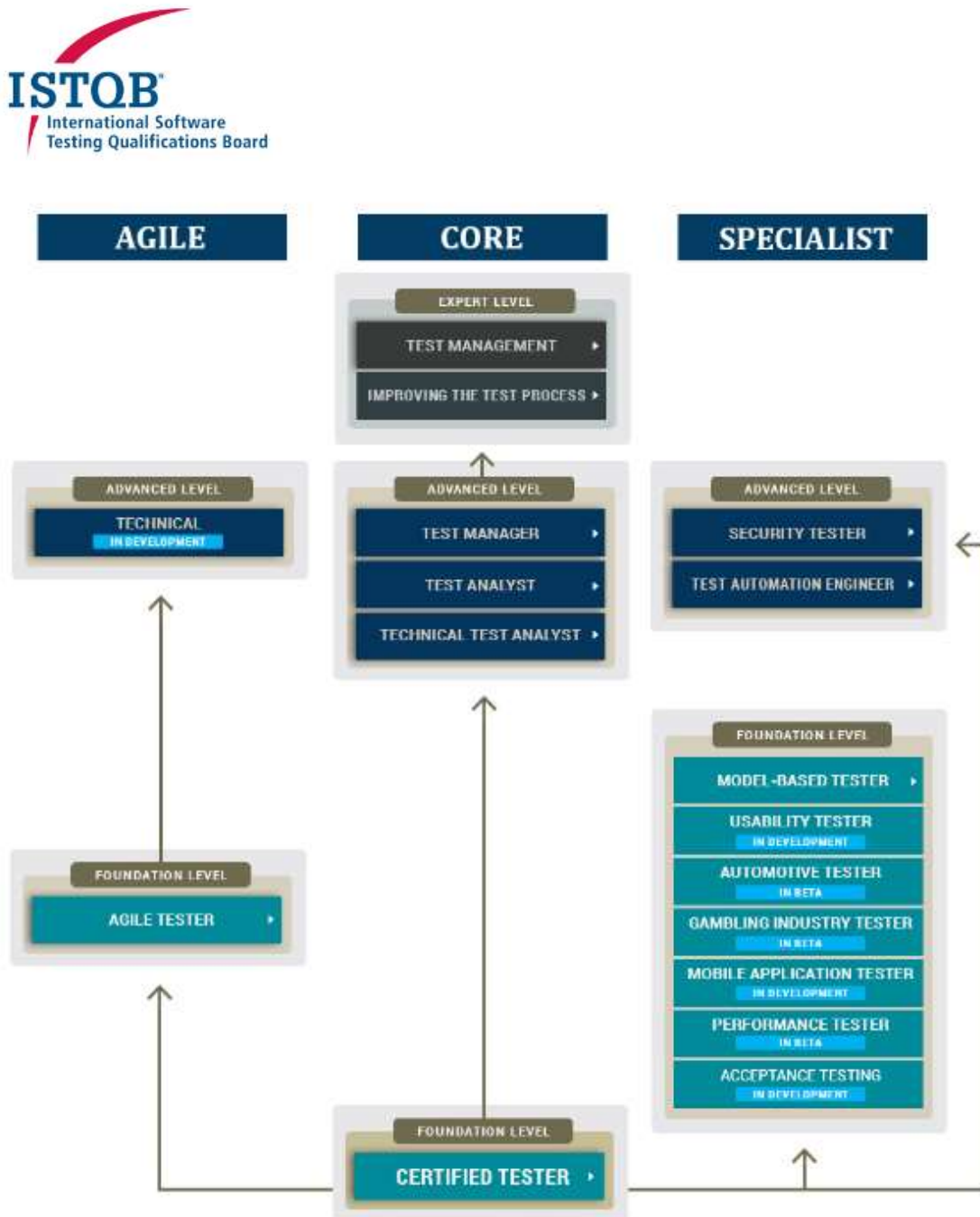
2.6 Keeping It Current

The software industry changes rapidly. To deal with these changes and to provide the stakeholders with access to relevant and current information, the ISTQB® working groups have created links on the www.istqb.org web site which refer to supporting documents, changes to standards and new occurrences in the industry. This information is not examinable under this syllabus.

3. Overview of the Gambling Industry Tester Specialist Syllabus

3.1 Business Outcomes

This section lists the Business Outcomes expected of a candidate who has achieved the Foundation Level Gambling Industry Tester Specialist certification.

GTFL-01 Promote efficient and effective communication by using a common vocabulary inside the gambling industry

GTFL-02 Understand specific quality attributes that require testing within the gambling industry

GTFL-03 Understand typical test practices by describing the standard software development and testing methodologies within the gambling industry

GTFL-04 Understand gambling hardware and software certification which is the main difference between the gambling industry and other industries

GTFL-05 Use established techniques for designing tests aligned with gambling specific needs

GTFL-06 Appreciate the importance of jurisdictions and regulatory bodies in the gambling industry

In general, a Certified Foundation Level Gambling Industry Tester Specialist is expected to have acquired the necessary skills to working effectively within a Gambling Industry testing team and environment.

3.2 Content

Chapter 1 Introduction to the Gambling Industry

- The tester should be able to recognize the objectives of the gambling syllabus
- The tester should be able to summarize the specific skills for gambling industry testing, not present in other testing areas
- The tester should be able to recognize the objectives of gambling
- The tester should be able to explain casino games, lottery systems, race and sports wagering, and online and mobile gambling
- The tester should be able to explain key concepts in the gambling industry such as progressive jackpots, random number generators, the win selection process, player privacy, geolocation, regulator commissions, jurisdictions and associations
- The tester should be able to explain gambling industry metrics
- The tester should be able to summarize the gambling software development lifecycle
- The tester should be able to recognize the role of the independent test lab and regulatory commissions

Chapter 2 The Gambling Industry EcoSystems

- The tester should be able to classify different test types for the quality assurance test phase
- The tester should be able to explain compliance testing
- The tester should be able to explain the gambling industry ecosystem
- The tester should be able to explain video lottery terminals and their ecosystem
- The tester should be able to explain slot machines and their ecosystem
- The tester should be able to explain lottery and its ecosystem

Chapter 3 Testing in the Gambling Industry

- The tester should be able to summarize the concepts of functional testing within the gambling industry
- The tester should be able to identify common areas where gambling and wager defects are found
- The tester should be able to summarize the concepts of casino game compliance testing
- The tester should be able to explain math testing
- The tester should be able to explain platform functional testing
- The tester should be able to identify what areas are covered by platform functional testing
- The tester should be able to summarize the concepts of platform compliance testing
- The tester should be able to identify what areas are covered by platform compliance testing
- The tester should be able to explain casino system functional testing
- The tester should be able to summarize the concepts of casino system compliance testing
- The tester should be able to identify what areas are covered by casino system compliance testing
- The tester should be able to summarize the concepts of protocol functional testing
- The tester should be able to identify what areas are covered by protocol functional testing
- The tester should be able to summarize the concepts of protocol compliance testing
- The tester should be able to identify what areas are covered by protocol compliance testing
- The tester should be able to summarize the concepts of hardware functional testing
- The tester should be able to identify what areas covered to find hardware functional testing
- The tester should be able to summarize the concepts of hardware compliance testing

- The tester should be able to identify what areas are covered by hardware compliance testing

- The tester should be able to summarize the concepts of hardware integration testing

- The tester should be able to identify what areas are covered by hardware integration testing

- The tester should be able to identify what test types are done for hardware integration testing

- The tester should be able to explain remote gambling testing

- The tester should be able to explain system and network security testing in the gambling industry

- The tester should be able to summarize the concepts of jackpot controller testing

- The tester should be able to identify what areas are covered by jackpot controller testing

- The tester should be able to summarize the concepts of online gambling testing

- The tester should be able to identify what areas are covered by online gambling testing

- The tester should be able to identify what test types are done for online gambling testing

3.3 Business Outcomes Traceability Matrix with Learning Objectives

This section lists the traceability between the Gambling Industry Tester Specialist Business Outcomes and the Gambling Industry Tester Specialist Learning Objectives.

Business Outcomes: Gambling Industry Tester Specialist		GTFL-01	GTFL-02	GTFL-03	GTFL-04	GTFL-05	GTFL-06
GTFL-01	using a common vocabulary inside the gambling industry	37					
GTFL-02	Understand specific quality attributes that require testing within the gambling industry		18				
GTFL-03	Understand typical test practices by describing the standard software development and testing methodologies within the gambling industry			20			
GTFL-04	Understand gambling hardware and software certification which is the main difference between the gambling industry and other testing industries				15		
GTFL-05	Use established techniques for designing tests aligned with gambling specific needs					12	
GTFL-06	Appreciate the Importance of jurisdictions and regulatory bodies in the gambling industry						14

Unique LO	LO in CTFL-GT	K-Level						
Chapter 1	Introduction to the Gambling Industry							
1.1	Objectives and Overview							
GTFL-1.1.1	Recognize the objectives of the gambling syllabus	1	X					
GTFL-1.1.2	Summarize the specific skills for gambling industry testing, not present in other testing areas	2	X					X
1.2	Gambling Activities and Artefacts							
GTFL-1.2.1	Recognize the objectives of gambling	1	X					
1.3	Types of Gambling							
GTFL-1.3.1	Explain casino games	2	X					X
GTFL-1.3.2	Explain lottery systems	2	X					X
GTFL-1.3.3	Explain race and sports wagering	2	X					
GTFL-1.3.4	Explain online and mobile gambling	2	X					
1.4	Key Concepts in the Gambling Industry							
GTFL-1.4.1	Explain progressive jackpots	2	X					
GTFL-1.4.2	Explain random number generators (RNG)	2	X					
GTFL-1.4.3	Explain the win selection process	2	X					
GTFL-1.4.4	Explain player privacy and geolocation	2	X					X

Business Outcomes: Gambling Industry Tester Specialist			GTFL-01	GTFL-02	GTFL-03	GTFL-04	GTFL-05	GTFL-06
GTFL-1.4.5	Explain regulatory commissions, jurisdictions and associations	2	X			X		X
1.5	Gambling Industry Metrics							
GTFL-1.5.1	Explain first pass percentage	2	X			X		
GTFL-1.5.2	Explain escape compliance defects	2	X			X		
1.6	Gambling Software Development Lifecycle							
GTFL-1.6.1	Summarize the gambling software development lifecycle	2			X			
GTFL-1.6.2	Recognize the role of the independent test lab	1	X			X		X
GTFL-1.6.3	Recognize the role of regulatory commissions	1	X			X		X
Chapter 2	Understand the Gambling Industry Ecosystems							
2.1	Testing phases within the Gambling Software Development Lifecycle							
GTFL-2.1.1	Classify different types of testing for the gambling quality assurance testing phase	2			X			
GTFL-2.1.2	Explain compliance testing	2			X		X	X
2.2	The Gambling Ecosystem							
GTFL-2.2.1	Explain the gambling industry ecosystem	2	X					X
GTFL-2.2.2	Explain Video Lottery Terminals and their ecosystem	2	X					
GTFL-2.2.3	Explain Slot machines and their ecosystem	2	X					
GTFL-2.2.4	Explain Lottery and its ecosystem	2	X					
Chapter 3	Testing in the Gambling Industry							
3.1	Gambling and Wagering Testing							
GTFL-3.1.1	Summarize the concepts of functional testing within the gambling industry	2	X	X	X		X	
GTFL-3.1.2	Identify common areas where gambling and wagering defects are found	2		X				
GTFL-3.1.3	Summarize the concepts of casino game compliance testing	2	X		X	X		X
3.2	Math Testing							
GTFL-3.2.1	Explain math testing	2	X	X	X	X	X	
3.3	Platform Testing							
GTFL-3.3.1	Summarize the concepts of platform functional testing	2	X	X	X		X	

Business Outcomes: Gambling Industry Tester Specialist			GTFL-01	GTFL-02	GTFL-03	GTFL-04	GTFL-05	GTFL-06
GTFL-3.3.2	Identify what areas are covered by platform functional testing	2	X		X			
GTFL-3.3.3	Summarize the concepts of platform compliance testing	2			X	X		X
GTFL-3.3.4	Identify what areas are covered by platform compliance testing	2	X		X	X		
3.4	Casino System Testing							
GTFL-3.4.1	Summarize the concepts of casino system functional testing	2	X	X	X		X	
GTFL-3.4.2	Summarize the concepts of casino system compliance testing	2			X	X		X
GTFL-3.4.3	Identify what areas are covered by casino system compliance testing	2	X		X	X		
3.5	Protocol Testing							
GTFL-3.5.1	Summarize the concepts of protocol functional testing	2	X	X	X		X	
GTFL-3.5.2	Identify what areas are covered by protocol functional testing	2	X		X			
GTFL-3.5.3	Summarize the concepts of protocol compliance testing	2			X	X		X
GTFL-3.5.4	Identify what areas are covered by protocol compliance testing	2	X		X	X		
3.6	Hardware Testing							
GTFL-3.6.1	Summarize the concepts of hardware functional testing	2	X					
GTFL-3.6.2	Identify what areas are covered by hardware functional testing	2		X	X		X	
GTFL-3.6.3	Summarize the concepts of hardware compliance testing	2			X	X		X
GTFL-3.6.4	Identify what areas are covered by hardware compliance testing	2		X	X	X		
GTFL-3.6.5	Summarize the concepts of hardware integration testing	2	X	X			X	
GTFL-3.6.6	Identify common areas where hardware integration defects are found	2		X				

Business Outcomes: Gambling Industry Tester Specialist			GTFL-01	GTFL-02	GTFL-03	GTFL-04	GTFL-05	GTFL-06
GTFL-3.6.7	Identify what test types are done for hardware integration testing	2		X			X	
3.7	Remote Gambling Testing							
GTFL-3.7.1	Explain remote gambling testing	2	X	X			X	
3.8	System and Network Security Testing							
GTFL-3.8.1	Explain system and network security testing in the gambling industry	2	X	X				
3.9	Jackpot Controller Testing							
GTFL-3.9.1	Summarize the concepts of jackpot controller testing	2	X	X			X	
GTFL-3.9.2	Identify what areas are covered by jackpot controller testing	2		X				
3.10	Online Gambling Testing							
GTFL-3.10.1	Summarize the concepts of online gambling testing	2	X	X			X	
GTFL-3.10.2	Identify what areas are covered by online gambling testing	2		X				
GTFL-3.10.3	Identify what test types are done for online gambling testing	2		X				

4. References

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

CSTB® is a registered trademark of the Canadian Software Testing Board (CSTB)

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)
[CSTB-Web]	Web site of the Canadian Testing Board. (www.cstb.ca) Refer to the latest ISTQB® Glossary and Syllabi. (www.istqb.org)