



## Certified Tester Advanced Level Technical Test Analyst Syllabus Version v4.0

### Release Notes

On June 25, 2021, the ISTQB® General Assembly voted on and approved the new version v4.0 of the Certified Tester Advanced Level Technical Test Analyst (CTAL-TTA) syllabus. Importantly, this new release includes updates aligned to change requests submitted by stakeholders shortly after the launch of the 2019 version of the syllabus. The new v4.0 syllabus has been developed by the ISTQB® task force for CTAL-TTA in accordance with the ISTQB® development process. The new 4.0 CTAL-TTA syllabus will be officially launched on **30<sup>th</sup> June 2021**.

The v4.0 updates impact 8 out of 40 Learning Objectives, that is, no more than 20% of Learning Objectives. For Accredited Training Providers, this update requires partial accreditation of training materials, as described in the ISTQB® Accreditation Process. Change requests that would impact other learning objectives have been postponed to the next major update.

For this partial accreditation the Accredited Training Provider will provide all training materials affected by the changes, as well as the updated coverage matrix provided for the initial accreditation.

**The new version v4.0 of the syllabus comes into effect on the launch date of June 30, 2021.**

All ISTQB® Member Boards which currently provide the CTAL-TTA Syllabus **in English** must:

- 1) retire the previous version 2019 of the CTAL-TTA Syllabus
- 2) use v4.0 of the CTAL-TTA Syllabus in their market

**No later than 12 months after this launch date, i.e. June 30, 2022.**

All ISTQB® Member Boards and Exam Providers which currently provide exams associated with the CTAL-TTA Syllabus version 2019 in English must ensure that all exam questions are consistent with the CTAL-TTA Syllabus version v4.0 no later than 12 months after the launch date.

All ISTQB® Member Boards which currently provide CTAL-TTA Syllabus version 2019 **in their local language** must:

- 1) retire their old CTAL-TTA Syllabus version 2019 translated to their local language
- 2) and either provide an updated / new translation of CTAL-TTA Syllabus version v4.0 in their local language
- 3) or only use the English version of the CTAL-TTA Syllabus version v4.0 in their market

**No later than 18 months after the launch date, i.e. December 31, 2022.**

All ISTQB® Member Boards and Exam Providers which currently provide exams for the CTAL-TTA syllabus version 2019 in their local language must ensure that all exam questions are consistent with the CTAL-TTA Syllabus version v4.0 no later than 18 months after the launch date.

The effect of this rule is that there will be no further activity at any ISTQB® Member Board regarding the previous 2019 version of the syllabus from 12 months after the launch date in English, and from 18 months after the launch date in non-English.

## What has been released

1. An updated version of the CTAL-TTA Syllabus, version v4.0.
2. An updated version v4.0 of the Sample Exam Questions and Answers Set A for the CTAL-TTA Syllabus v4.0.
3. An updated version of the exam structure table, Exam Structure Tables v1.1. (the separate version of Exam Structure and Rules document is retired)
4. Release Notes (this document).

## Syllabus Change Log

Training Providers, Exam Providers, Member Boards and Students of the Syllabus should be aware of the changes listed below.

### Major changes:

- **TTA 2.6.1 (K3)** Write test cases for a given specification item by applying McCabe's Simplified Baseline Method – this Learning Objective has been removed from the syllabus.
- **TTA 2.8.1 (K4)** Select an appropriate white-box test technique according to a given project situation – Section 2.8 of the syllabus has been rewritten and split into two parts, regarding safety-related and non-safety-related systems.
- **TTA 3.2.2 (K3)** Use data flow analysis to detect if code has any data flow anomalies. K-level changed from K2 to K3.
- **TTA 3.2.4 (K2)** Explain the use of call graphs for establishing integration testing strategies – this Learning Objective has been removed from the syllabus.

- **TTA 4.4.1 (K2)** Explain the reasons for including reliability testing in a test approach – the corresponding Section 4.4 in the syllabus has been updated.
- **TTA 4.4.2 (K2)** Explain the principal aspects to be considered in planning and specifying reliability tests – the corresponding Section 4.4 in the syllabus has been updated.
- **TTA 4.5.1 (K2)** Explain the reasons for including performance efficiency testing in a test approach – the corresponding Section 4.5 in the syllabus has been updated.
- **TTA 4.5.2 (K2)** Explain the principal aspects to be considered in planning and specifying performance efficiency tests – the corresponding Section 4.5 in the syllabus has been updated.

### Changes that do not impact exam questions:

- Operational Profiles are now explicitly covered in a separate Section 4.9.
- Examples removed from Section 2 and Section 6.
- Info about RESTful services added in Section 2.7.
- Cyclomatic complexity explicitly added to Learning Objective TTA 3.2.1 (K3).
- Definitions of quality characteristics removed from the syllabus, according to the rule that the glossary definitions should not be repeated in the syllabi.
- Section 1: keyword “project risk” added.
- Section 2: keywords “anomaly”, “control flow” and “safety integration levels” added, keywords “control flow testing”, “cyclomatic complexity”, “path testing”, “short circuiting” removed.
- Section 3: keywords “pairwise integration testing” and “neighborhood integration testing” removed.
- Section 4: keyword “operational acceptance testing” removed.
- Section 5: keywords: “review” and “technical review” added, keyword “anti-pattern” removed.
- Section 6: keywords: “fault injection” and “model based testing (MBT)” added, keywords “debugging”, “hyperlink”, “performance efficiency” and “test management” removed.
- Keyword “co-existence” corrected to “coexistence”.
- Various wording improvements across the whole syllabus.

### Revision notes for this document

Date	Remarks
30 June 2021	First published version