

# ISTQB® CTAL

## Test Automation Engineer

The **Advanced Level Test Automation Engineer** qualification is aimed at people who have already achieved an advanced point in their careers in software testing and wish to develop further their expertise in automation testing. The modules offered at the **Advanced Level** cover a wide range of testing topics.

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

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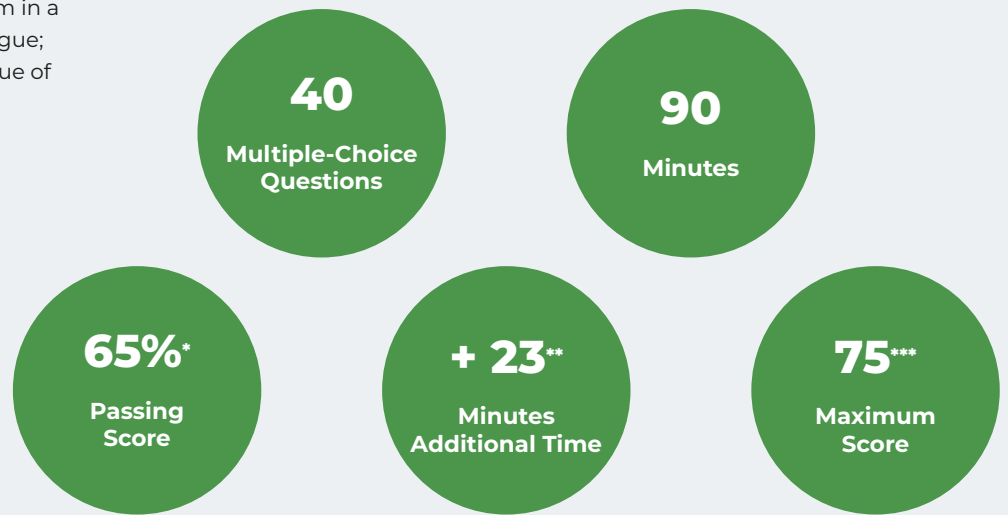
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|---|---|
| <b>Test Automation</b>                                      | <b>Test Automation Reporting and Metrics</b>                    |
| Purpose of Test Automation                                  | Selection of TAS Metrics  |
| Success Factors   | Implementation of Measurement                                   |
|   | Logging of the TAS and the SUT                                  |
|   | Test Automation Reporting                                       |
| <b>Preparing for Test Automation</b>                        | <b>Transitioning Manual Testing to an Automated Environment</b> |
| SUT Factors Influencing Test Automation                     | Criteria for Automation   |
| Tool Evaluation and Selection                               | Automation within Regression Testing                            |
| Design for Testability and Automation                       | Automation within New Feature Testing                           |
|   | Automation of Confirmation Testing                              |
| <b>The Generic Test Automation Architecture</b>             | <b>Verifying the TAS</b>  |
| Introduction to gTAA  | Verifying Automated Test Environment Components                 |
| TAA Design  | Verifying the Automated Test Suite                              |
| TAS Development   |   |
| <b>Deployment Risks and Contingencies</b>                   | <b>Continuous Improvement</b>                                   |
| Test Automation Approach and Planning of Deployment/Rollout | Options for Improving Test Automation                           |
| Risks Assessment and Mitigation Strategies                  | Test Automation Improvement                                     |
| Test Automation Maintenance                                 |   |

## EXAM STRUCTURE

\* 49 points or more;

\*\* Only for participants taking the exam in a language other than their mother tongue;

\*\*\* Each correct answer can have a value of 1 to 3 points.



## BUSINESS OUTCOMES

- Contribute to the development of a plan to integrate automated testing within the testing process;
- Evaluate tools and technology for automation best fit to each project and organization;
- Create an approach and methodology for building a test automation architecture (TAA);
- Design and develop (new or modified) test automation solutions that meet the business needs;
- Enable the transition of testing from a manual to an automated approach;
- Create automated test reporting and metrics collection;
- Manage and optimize testing assets to facilitate maintainability and address evolving (test) systems.

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