

# ISTQB-based Software Testing Education: Advantages and Challenges

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**Abstract**—The International Software Testing Qualifications Board (ISTQB) is a widely-recognized organization that provides a certification scheme in the field of software testing. The knowledge this scheme sets for different levels and areas of software testing has become a standard terminology and requirement for software testers in the industry. In the first part of this paper, in a small survey, we examine the importance of certification in the industry, then we do a literature review to investigate to what extent the ISTQB material is used in university curricula. We examined job-offering portals and discovered that LinkedIn and Jobline mostly had job listings that favored the certificate, however, many jobs required the same skills and knowledge that the ISTQB Foundation Level certificate provides. Therefore, we recommend that universities include software testing in their computer science curriculum and accommodate the principles outlined by ISTQB. In the last part of the paper, we highlight the challenges of using ISTQB material in education based on our experience and show some possible solutions to overcome them. In conclusion, by providing sufficient knowledge, universities can provide an opportunity for students and companies to save time spent on post-graduate training for test-related positions.

**Index Terms**—ISTQB, Test Education, Higher Level Education, Testing