• Chapter 1: Fundamentals of Testing (180 minutes)

o The student learns the basic principles related to testing, the reasons why testing is required, and what the test objectives are.

o The student understands the test process, the major test activities, and testware. o The student understands the essential skills for testing.

• Chapter 2: Testing Throughout the Software Development Lifecycle (130 minutes)

o The student learns how testing is incorporated into different development approaches.

o The student learns the concepts of test-first approaches, as well as DevOps.

o The student learns about the different test levels, test types, and maintenance testing.

• Chapter 3: Static Testing (80 minutes)

o The student learns about the static testing basics, the feedback and review process.

• Chapter 4: Test Analysis and Design (390 minutes)

o The student learns how to apply black-box, white-box, and experience-based test techniques to derive test cases from various software work products.

o The student learns about the collaboration-based test approach.

• Chapter 5: Managing the Test Activities (335 minutes)

o The student learns how to plan tests in general, and how to estimate test effort.

o The student learns how risks can influence the test scope.

o The student learns how to monitor and control test activities.

o The student learns how configuration management supports testing.

o The student learns how to report defects in a clear and understandable way.

• Chapter 6: Test Tools (20 minutes)

o The student learns to classify tools and to understand the risks and benefits of test automation.