COURSE OVERVIEW
This course explains the fundamentals of performance testing throughout the software development life cycle (SDLC). It provides a theoretical framework for selecting, motivating, implementing and maintaining performance testing within your organisation.

COURSE CONTENT
The course covers the following areas:

PERFORMANCE TESTING LIFE CYCLE
This section defines performance testing and its processes. It touches on why performance testing is done and how performance risk is mitigated. It addresses the issue of where and how performance testing can be implemented in traditional and Agile SDLCs.

PERFORMANCE TEST PLANNING
This section defines and explains the following activities and concepts for performance test planning:
- Objectives
- Approach
- Deliverables
- Test and Production Environment Comparative Analysis
- Assumptions
- Performance Requirements and Acceptance Criteria
- Resource Requirements and Scheduling
- Risk and Contingencies
- Tool Selection
- Cost and Budget

PERFORMANCE TEST DESIGN
This section defines and explains the following activities and concepts for performance test design:
- Collection of functionalities or features to be tested
- Quantitative acceptance criteria
- Performance test type(s)
- Test data requirements
- Duration and number of iterations of the load executed.
PERFORMANCE TEST PREPARATION
This section defines and explains the following activities and concepts for performance test preparation:
• Performance test scripts for the selected performance testing tool
• Preparation of test data
• Configuring application and physical test environment
• Setup and configuring of performance test monitoring tools

PERFORMANCE TEST EXECUTION
This section defines and explains the activities and concepts for performance test execution.

ANALYSING PERFORMANCE TEST RESULTS
This section defines and explains the following activities and concepts for analysing performance test results:
• Highest/Lowest/Average throughout
• Network latency
• Memory leaks
• Pass/fail information comparison with acceptance criteria for test scenarios
• Statistics of quantitative results
• Finding performance bottlenecks and suggestions

PERFORMANCE TEST REPORTING
Report and delivery of performance test reports to the relevant project stakeholders.

SKILLS AND EXPERIENCE
This section will discuss the skills and experience required for different levels of performance test automation specialists.

COURSE PREREQUISITES
Although this is a high level course, it would be beneficial for candidates to have some level of software development or networking experience.