

# Software Tester (Level 4)



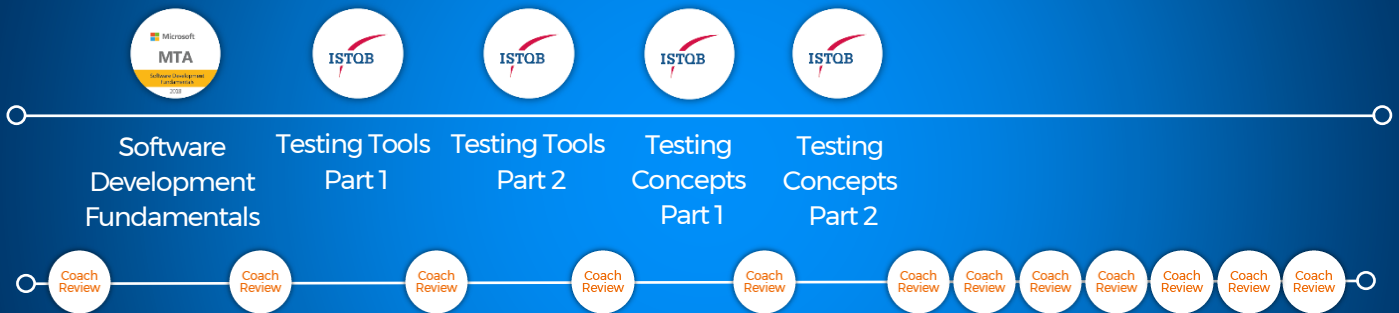
## Phase 1

Induction & Initial Assessment



## Phase 2

Training Modules & contact from Skills Development Coach



## Phase 3

Assessment Gateway



## Phase 4

End Point Assessment



## Apprenticeship Standard Software Tester (Level 4)

## Blended Learning breakdown

		Training Centre	Remote
<b>Phase 1</b>	Induction & Initial Assessment	1 day	Training Centre only
<b>Phase 2</b>	Software Development Fundamentals - Part 1 (MTA 98 - 361 Software Development Fundamentals C#)	1 week	Training Centre only
	Software Development Fundamentals - Part 2 (MTA 98 - 361 Software Development Fundamentals C#)	1 week	Training Centre only
	Testing Tools - Part 1 (ISTQB Foundation Level)	1 week	20 hours self-study 4 remote training
	Testing Tools - Part 2 (ISTQB Foundation Level)	1 week	20 hours self-study 4 remote training
	Testing Concepts - Part 1 (ISTQB Foundation Level)	1 week	20 hours self-study 4 remote training
	Testing Concepts - Part 2 (ISTQB Foundation Level)	1 week	20 hours self-study 4 remote training
<b>Phase 3</b>	Assessment Gateway	Up to 1 week*	Training Centre only
<b>Phase 4</b>	End Point Assessment	3 - 5 days	Training Centre only

\*To be arranged by your Skills Development Coach

# Course Details



## Induction/Initial Assessment

1 day in the training centre

## Functional Skills

**If required, learners will sit a Maths and/or 3 English exams.**  
Allow 1 – 2 days per exam.

## Testing Tools - Part 1 (ISTQB Foundation)

- Software testing objectives and purpose
- Defect, bugs, fault and failures
- Defect or Bug Life Cycle
- Principles of testing
- Fundamental test process
- Psychology of testing
- Software Quality
- Test analysis, design and Implementation
- Testing techniques
- Decision tables

## Testing Tools - Part 2 (ISTQB Foundation)

- Testing types and techniques
- Test coverage
- Types of coverage
- Types of test tools
- Advantages and benefits of using testing tools
- Disadvantages and risks of testing tools
- Factors for software testing tool selection
- Proof-of-concept or piloting phase for tool evaluation

## Testing Concepts – Part 1 (ISTQB Foundation)

- Verification and Validation
- Capability Maturity Model (CMM-Levels)
- Software Development Life Cycle
- Software Development Models
- Software Testing Levels
- Impact analysis
- Test design techniques
- Static test technique
- Informal reviews
- Formal reviews
- The roles and responsibilities of the moderator, author, scribe, reviewers and managers involved during a review
- Types of review

## Testing Concepts - Part 2 (ISTQB Foundation)

- Roles and responsibilities of a Test Leader
- Roles and responsibilities of a Tester
- Purpose and importance of test plans
- Estimation techniques
- Factors affecting test effort
- Test strategy
- Test monitoring
- Test control
- Configuration management
- Risks in software testing
- Risk analysis
- Incident management



## Software Development Fundamentals - Part 1

- Computer storage and data types
- Computer decision structures
- How to identify the appropriate method for handling repetition
- Error handling
- Algorithms and data structures
- The fundamentals of classes
- Inheritance
- Polymorphism
- Encapsulation
- Application Life Cycle management
- How to interpret application specifications

## Software Development Fundamentals - Part 2

- Web page development
- Microsoft ASP.NET web application development
- Web hosting
- Web services
- Windows apps
- Console-based applications
- Windows Services
- Relational database management systems
- Database query methods
- Database connection methods



## Assessment Gateway, Assessment Preparation & Administration Week

**(Up to 1 week in the training centre)**  
Preparation week to understand the four elements of the assessment gateway.

## Assessment Phase

**Summative Portfolio**

**Synoptic Project**

**Technical Interview with SME**

**Employer Reference**

## Achievement of Apprenticeship

**BCS Software Tester (Level 4)**