

Software Development Technician (Level 3)



Phase 1

Induction & Initial Assessment



Phase 2

Training Modules & contact from Skills Development Coach

Apprenticeship Standard

Software Development Technician (Level 3)



Phase 3

Assessment Gateway



Phase 4

End Point Assessment



Blended Learning breakdown

		Training Centre	Remote
Phase 1	Induction & Initial Assessment	1 day	Training Centre only
Phase 2	Software Development Fundamentals - Part 1 (MTA Software Development Fundamentals C#)	1 week	Training Centre only
	Software Development Fundamentals - Part 2 (MTA Software Development Fundamentals C#)	1 week	Training Centre only
	Software Development Context and Methodologies - Part 1	1 week	20 hours self-study 4 remote training sessions
	Software Development Context and Methodologies - Part 2	1 week	20 hours self-study 4 remote training sessions
	Programming - Part 1	1 week	20 hours self-study 4 remote training sessions
	Programming - Part 2	1 week	20 hours self-study 4 remote training sessions
Phase 3	Assessment Gateway	Up to 1 week*	Training Centre only
Phase 4	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

MTA Software Development Fundamentals C# - Part 1

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

MTA Software Development Fundamentals C# - 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



Functional Skills

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

Software Development Methodologies and Context - Part 1

- The business context and market environment for software development
- How to recognise that there are different methodologies that can be used for software development
- The roles within the software development team
- The structure of software applications and the particular context for the development platform (whether web, mobile, or desktop applications)

Software Development Methodologies and Context - Part 2

- All stages of the software development lifecycle
- Different types of testing
- How to test code
- The role of configuration management and version control systems and how to apply them



Programming - Part 1

- How to implement code, following a logical approach
- How code integrates into the wider project
- How to follow a set of functional and non-functional requirements
- The end-user context for the software development activity
- The importance of seamlessly connecting applications to databases and understand types of data storage and their applications

Programming - Part 2

- How to demonstrate knowledge of database normalisation
- Why there is a need to follow good coding practices
- The principles of good interface design
- The importance of building security in to software at the development stage



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
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