QA

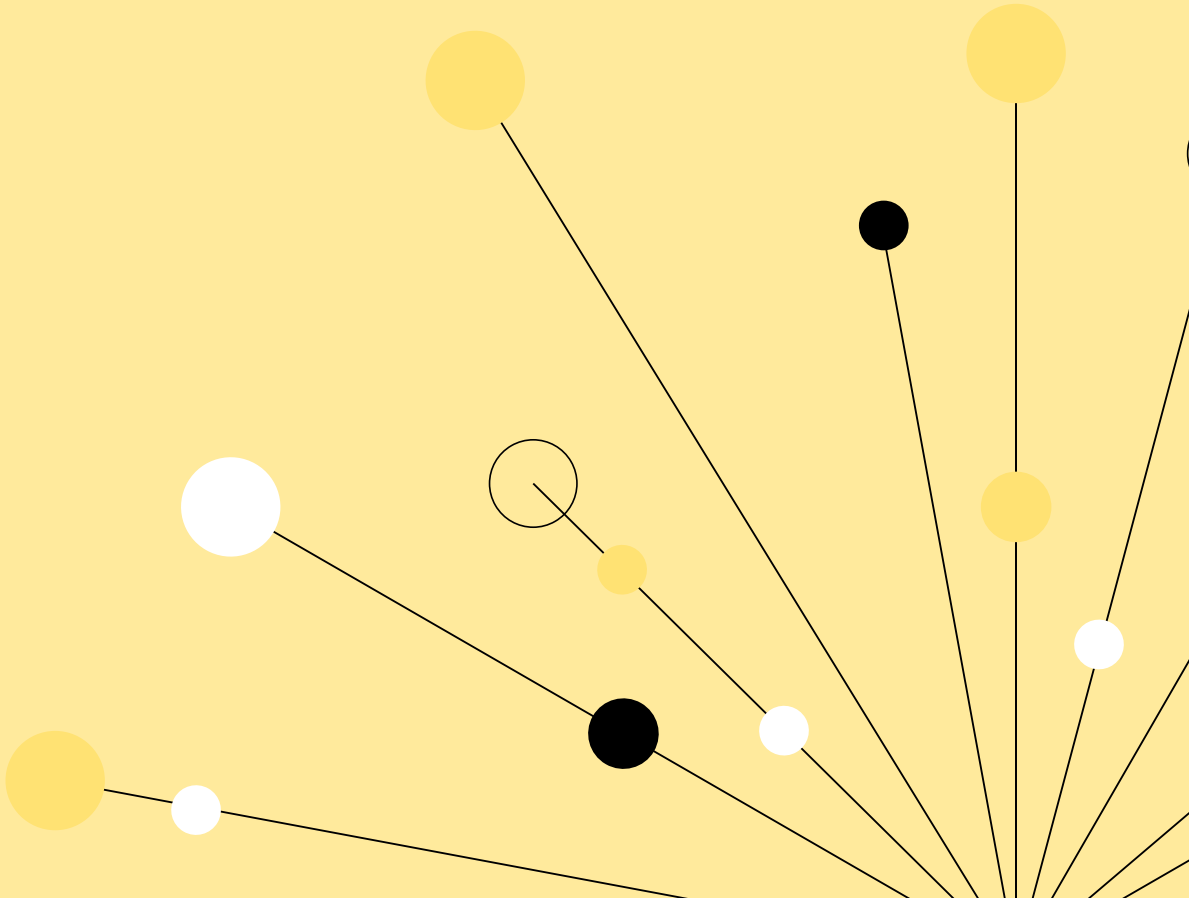
Learn. To Change.

Apprenticeships England

Junior Developer

Level 3 Apprenticeship

Programme Guide



QA.com

Why QA?

Endorsed by 4,000+ global clients, we are the leader in applied and cohort-based learning academies.

Today's biggest technological shifts are shaped by AI, cloud, and data.

In every technology revolution, there are winners and losers – and teams with applied skills make all the difference. We believe you can't change an organisation unless you change the capabilities of its people and ensure human and machine intelligence work together.

Success in numbers:

35+
Years of training experience

1,000+
AI, cloud & coding hands-on labs

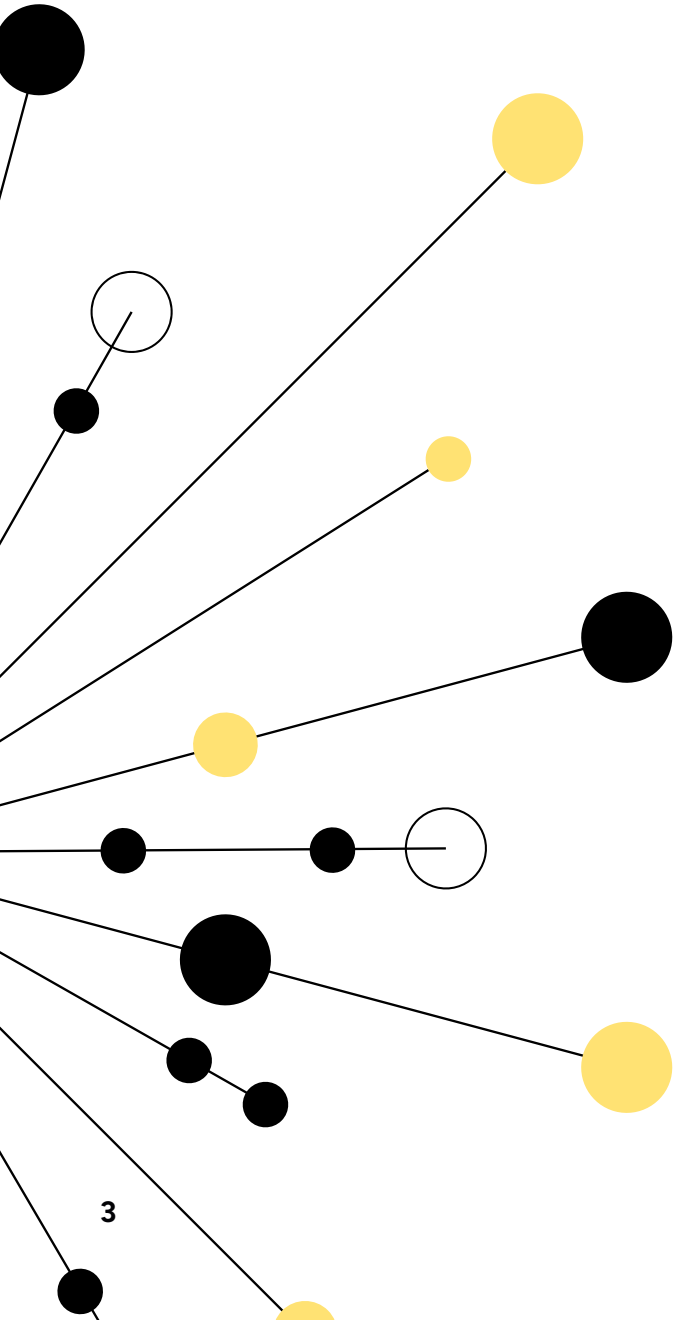
40,000+
Careers launched & accelerated

£500M+
Levy spend invested

24 hours
Feedback time for submissions

<1 minute
Response time to learner queries

Ready to explore how QA can support you?
Let's dive in!



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Creating Change

Junior developers assist software teams in building user-friendly digital solutions.

This programme equips your organisation with foundational skills to support all software design, coding, and development aspects, enhancing project efficiency and quality.

Our apprenticeships drive business results by empowering organisations to apply skills consistently at speed and scale.

Optimise Development Cycle

Equip developers with the skills and tools essential for each stage of the software development lifecycle.

Cross-Functional Team Development

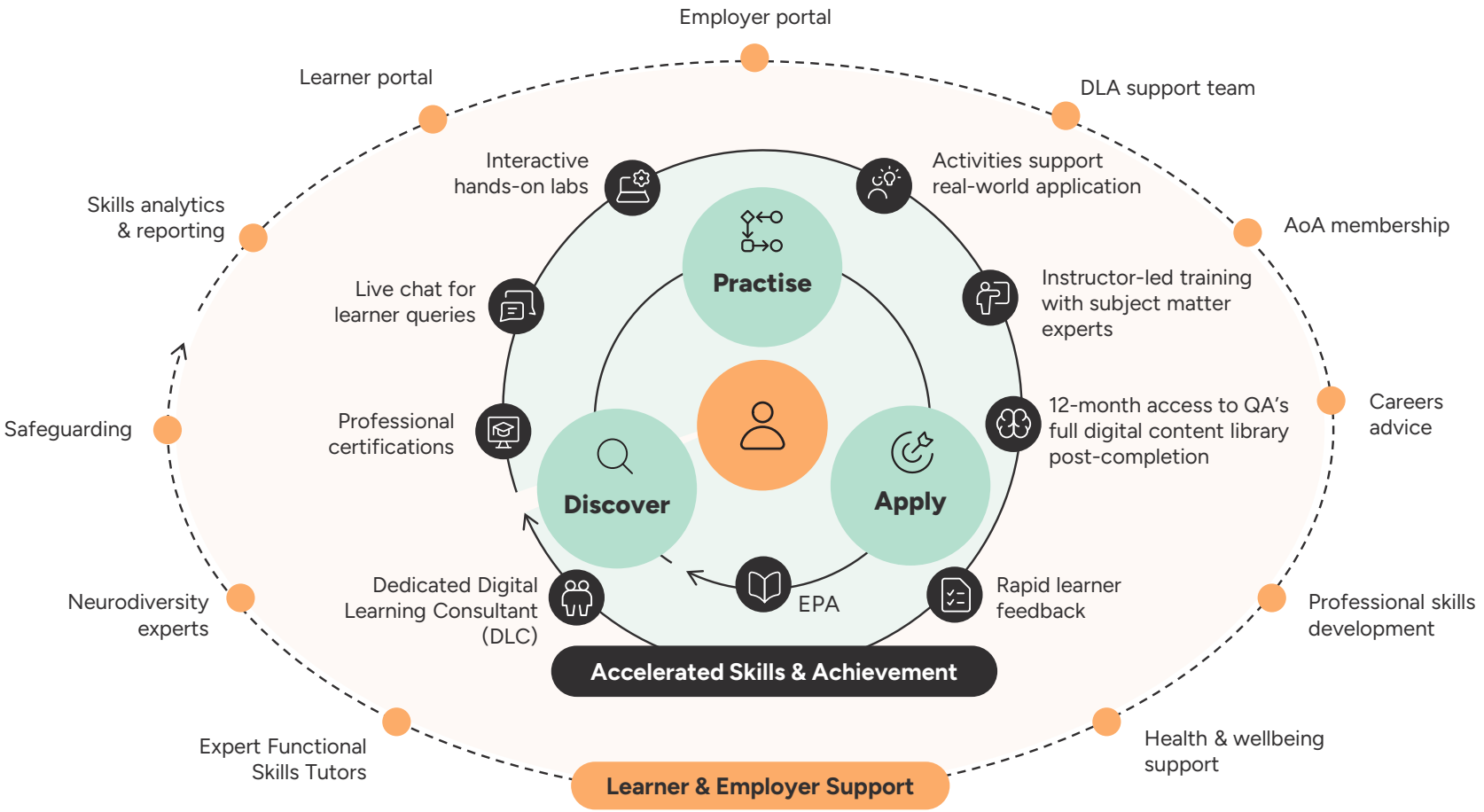
Cultivate proficiency in app development, database management, and front-end design for effective collaboration across software teams.

Streamline Component Development

Enable teams to manage tasks, prioritise effectively, and apply development methodologies to meet requirements.

Digital by Design

Our market-leading approach accelerates skill development and achievement through our **Discover**, **Practise**, **Apply** methodology, ensuring that both learners and employers are fully supported throughout their programme.



Discover

Leveraging QA's learning platform, learners follow a development path focused on their job role.

Practise

Learners come together for instructor-led training sessions, practising their skills through hands-on labs and sandboxes in a safe environment while collaborating with peers.

Apply

These practiced learnings are applied on the job through work-based activities at key and sequenced stages, fully supported and reviewed by the specialist DLC team.

Programme Overview

Details of standard: Software Development Technician

Total cost: £15,000

Programme duration: 16 months

Live instructor sessions: 19 days

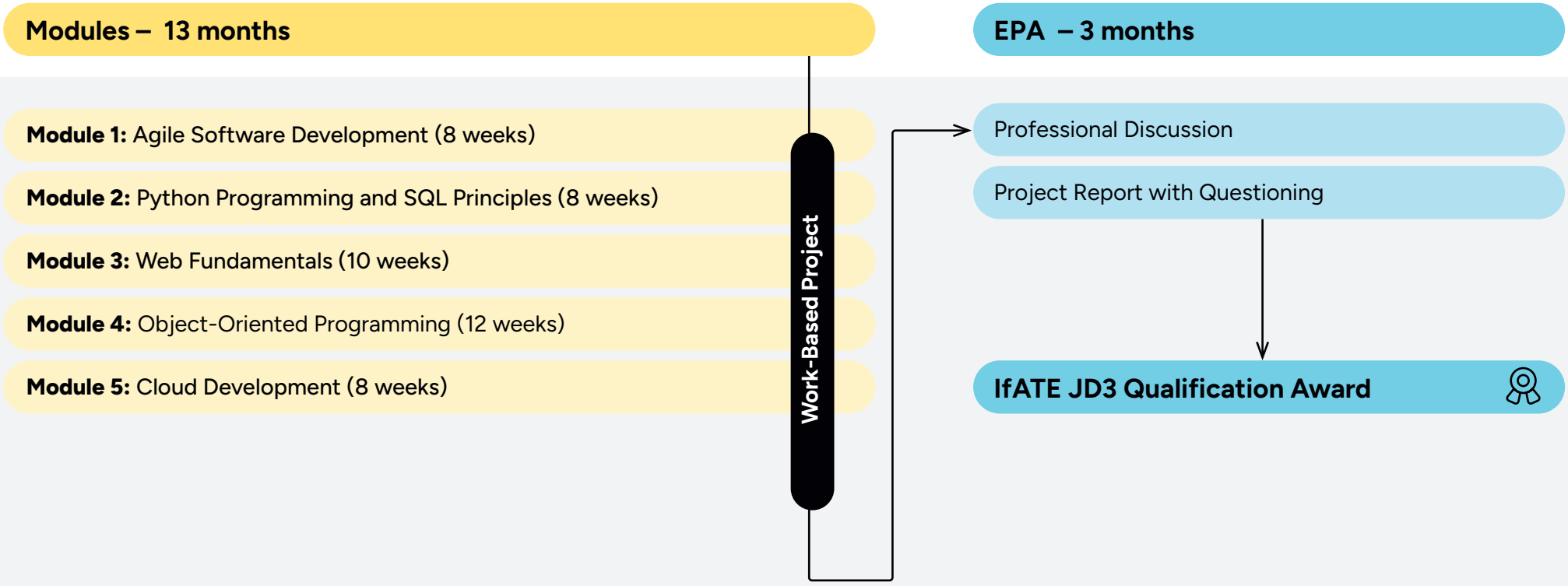
Experience QA's self-paced learning platform with interactive labs and configurable learning.

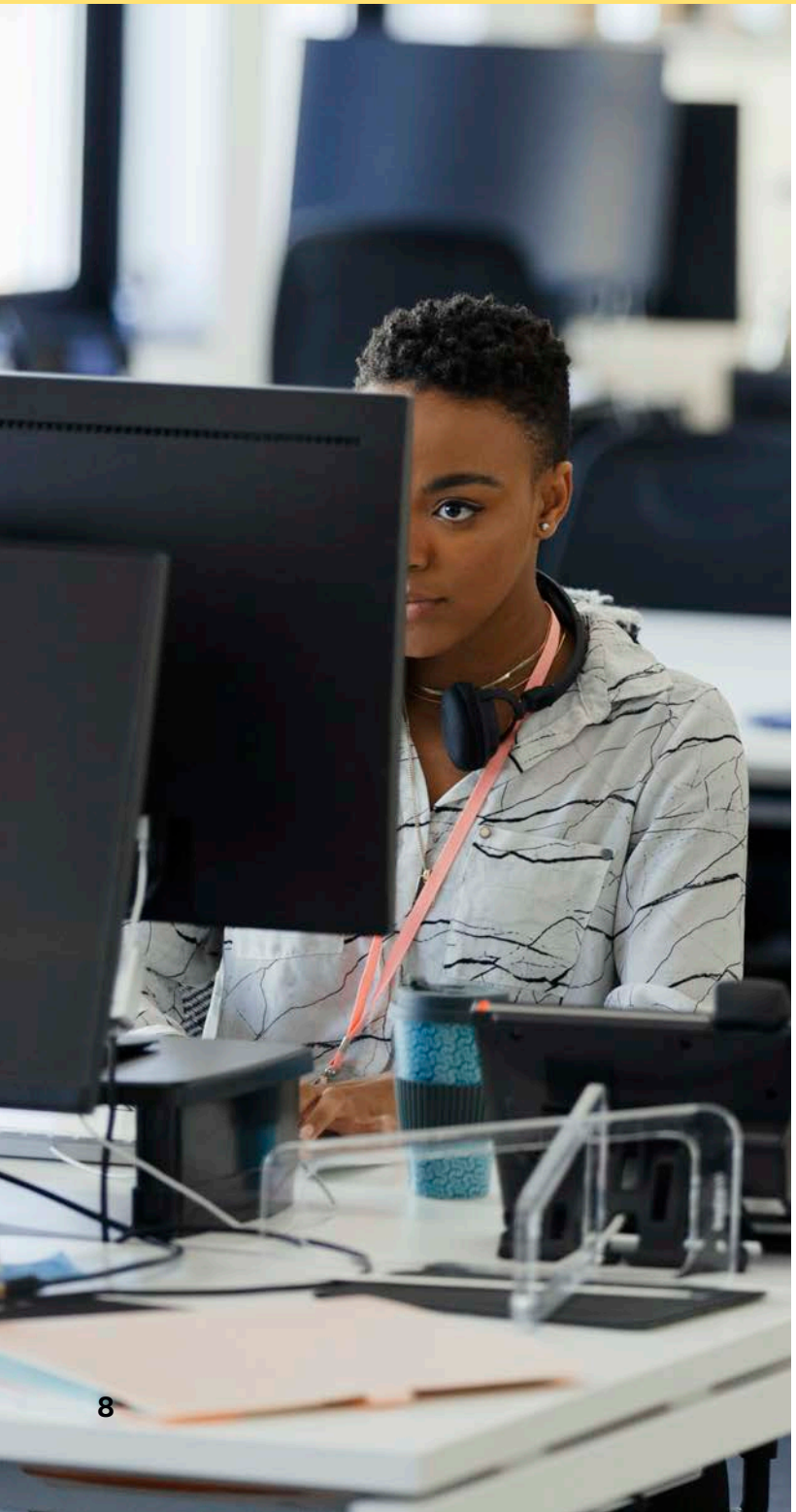
- Agile Software Development
- Python Programming
- SQL Principles
- Web Fundamentals
- Object-Orientated Programming
- Cloud Development

Learner Journey

The Junior Developer programme integrates live and online workshops with self-paced learning, employing a guided discovery approach for individual learner contexts.

Learners are assigned a Digital Learning Consultant (DLC) for personalised coaching and support. These specialists ensure their successful progress, wellbeing, and readiness for assessments.





Modules

Following each module, learners apply their newly acquired knowledge and skills to ongoing work projects.

01

Module 1:
Agile Software Development

Introduces the key principles, frameworks, and practices of Agile software development, with a focus on the Scrum methodology.

It highlights how the flexible, collaborative, and iterative approach fits within the Software Development Lifecycle (SDLC) and enables high-performing teams to plan, execute, and deliver projects effectively.

Topics:

- IT & Software Project Management Basics
- Waterfall vs. Agile: Choosing the Right Approach
- Agile Fundamentals & Scrum Methodology
- Software Development Lifecycle (SDLC)
- Acceptance Criteria, User Stories & Kanban
- Risk Management, Prioritisation & Estimation
- Git Basics & Version Control
- Agile Metrics: KPIs & SLAs
- Growing as a Developer (CPD)

Live Instructor Sessions: 3 Days

02

Module 2:
Python Programming and SQL Principles

Covers Python, a user-friendly language, along with essential SQL commands for managing relational and non-relational databases – featuring hands-on labs linking Python applications to SQL databases.

Topics:

- Python Programming Basics
- Control Flow & Functions
- SQL Fundamentals
- Data Handling & Management
- Software Development Practices
- Testing & Debugging
- Version Control & Collaboration with GitHub

Live Instructor Sessions: 3 Days

03

Module 3:
Web Fundamentals

Explores web development using HTML, CSS, and JavaScript. Build basic web pages and applications with a focus on UI/UX. Includes modern JavaScript frameworks for creating dynamic, responsive applications.

Topics:

- Simple HTML Pages
- CSS for Styling and Layout
- Responsive Web Design
- Client-Side JavaScript
- JavaScript Data Structures & Control
- Intro to React.js, Angular.js, Node.js

Live Instructor Sessions: 5 Days

04

Module 4:
Object-Orientated Programming

Examines core OOP concepts using Java and C#, focusing on class creation, inheritance, and key techniques. It also covers basic testing to ensure application reliability.

Topics:

- Java & C# Basics
- Object-Oriented Programming & Data Structures
- Programming Paradigms
- Error Handling & Secure Coding
- AI Tools
- Software Testing
- Design Principles

Live Instructor Sessions: 5 Days

05

Module 5:
Cloud Development

Focuses on microservices, cloud services, database integration, and embedding queries in applications. It covers CI/CD, testing, software management, version control, build servers, and cloud deployment strategies.

Topics:

- Cloud Basics & Security
- API Development
- Microservices
- Data Modelling & SQL
- Performance Optimisation
- Testing & TDD
- CI/CD & DevOps
- Regulatory Compliance

Live Instructor Sessions: 3 Days

Tools and Technologies

Programming Languages

- Python
- Java (SE) / C#
- HTML
- CSS
- JavaScript

Testing

- PyUnit
- JUnit / NUnit
- Maven

Integrated Development Environments (IDEs)

- Eclipse
- Visual Studio / VSCode

Databases and Software

- SQL
- JDBC (or C# equivalent)

Project Management

- Trello
- Jira
- Git
- GitHub

General Tools

- MS Office
- Windows OS
- CoPilot

Development Methodologies

- Agile
- Scrum
- Waterfall
- Peer Programming
- Test-Driven Development (TDD)

End-Point-Assessment

We ensure all learners are fully prepared for their End-Point-Assessment (EPA) through our internal gateway process, maximising their success rates.

Assessment criteria:

01

Knowledge
Ability to convey knowledge effectively.

02

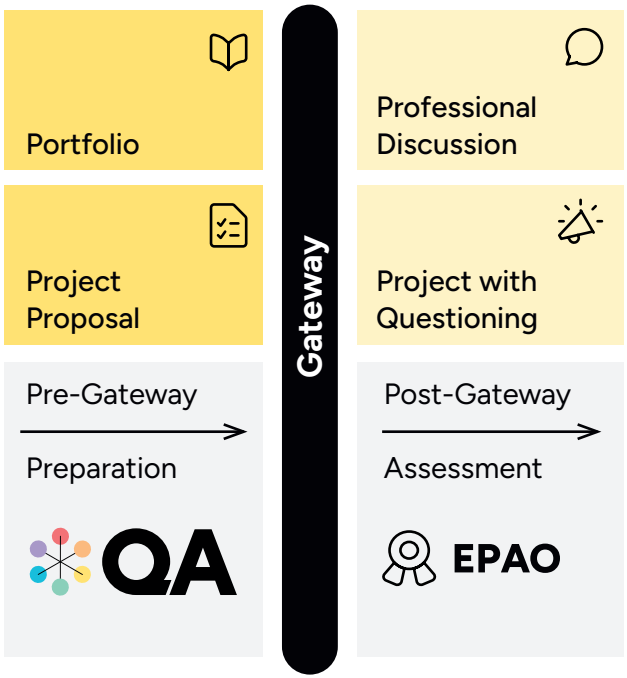
Skills
Demonstrate practical skills with confidence.

03

Behaviour
Exhibit professional workplace behaviour.

Explore the detailed assessment criteria within the **Software Development Technician standard.**

EPA process:



Professional Discussion:
Engage in a formal two-way conversation to showcase knowledge, skills, and behaviours.

Project with Questioning:
Demonstrate competence in software development by addressing a stakeholder specification for a specific problem or opportunity, supported by a Q&A.

Ready to partner with us?

Let's talk:

0113 220 7150

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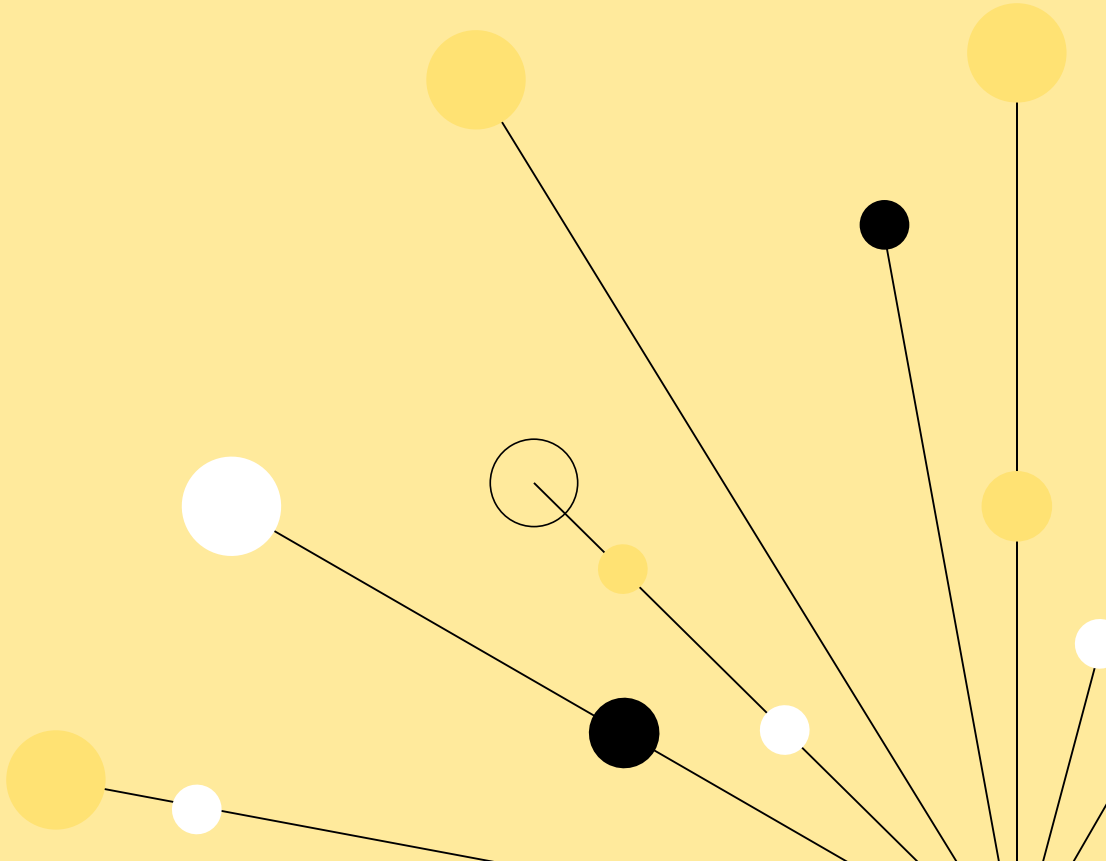

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