

Software Developer Advanced Apprenticeship

Ofsted Outstanding Provider

Course Level: Level 4

Campus: Newcastle

Subject Type: Computing, Technology & Esports

Course Overview:

The Software Developer advanced apprenticeship gives learners advance skills and technical grounding to design, test and maintain software and web systems. Building on existing knowledge, you will learn advanced project management skills & development practices, creating future leaders.

What's Covered:

The role of Software Developer is an occupation that is found across every sector for example, Financial Services, Computer Gaming, Retail, Transport, Security and Defence in organisations ranging from large multi-nationals, public sector bodies and government projects developing multi-billion-pound software solutions to support key projects to small consultancy firms designing bespoke software solutions for clients.

Typical job roles include:

- Application developer
- Mobile application developer
- Software developer
- Web developer

What will be included in the Off the Job training?

K1: all stages of the software development life-cycle (what each stage contains, including the inputs and outputs)

K2: roles and responsibilities within the software development lifecycle (who is responsible for what)

K3: the roles and responsibilities of the project life-cycle within your organisation, and your role

K4: how best to communicate using the different communication methods and how to adapt appropriately to different audiences

K5: the similarities and differences between different software development methodologies, such as agile and waterfall.

K6: how teams work effectively to produce software and how to contribute appropriately

K7: software design approaches and patterns, to identify reusable solutions to commonly occurring problems

K8: organisational policies and procedures relating to the tasks being undertaken, and when to follow them. For example the storage and treatment of GDPR sensitive data.

K9: algorithms, logic and data structures relevant to software development for example:- arrays- stacks- queues- linked lists- trees- graphs- hash tables- sorting algorithms- searching algorithms- critical sections and race conditions

K10: principles and uses of relational and non-relational databases

K11: software designs and functional or technical specifications

K12: software testing frameworks and methodologies

Entry Requirements:

Candidates need a minimum of four GCSEs, including maths & English (minimum grade 4/C).

If you do not hold a suitable maths or English qualification, you will complete initial assessments to identify if you can achieve Functional Skills at Level 2.

Assessment Information:

End Point Assessment (EPA):

Assessment method 1: Work-based project with questioning

Assessment method 2: Professional discussion underpinned by portfolio of evidence

The full End Point Assessment Plan can be viewed on the Institute for Apprenticeships' website along with further details linked to the Apprenticeship Standard. Find out more here.

Fees and Financial Support:

While you are on an apprenticeship your employer pays you a salary and supports you whilst you undertake your training

Progression:

If you successfully achieve all parts of the apprenticeship, your assessor will discuss with you and your employer the next steps to take. Dependent on your roles and responsibilities, this may be the next level of the subject you have been studying already or a different pathway.

What else do I need to know?

An apprentice typically works for a minimum of 30 hours a week at the employer's site, plus one day each week developing knowledge at college or in the workplace.

How do I find out more?

For further information please call:

T: 01782 254287 (Newcastle office)

T: 01785 275660 (Stafford office)

E: apprenticeships@nscg.ac.uk