



Institute for Apprenticeships & Technical Education

Higher technical qualification submission form

Awarding body information

Awarding body information

What is the name of the awarding body?

Nottingham Trent University

Is the awarding body a higher education provider?

Yes

Is the awarding body on the Office for Students register?

Yes

Qualification information

Qualification information

You can only submit one qualification for each form. If you are submitting multiple qualifications you must start a new form for each qualification. Please include the name of the qualification as it appears on Ofqual register or UCAS. Include the size of the qualification. e.g. award, certificate, diploma

What is the name of the qualification?

Certificate of Higher Education (CertHE) Software Development

Is the qualification on the Ofqual register?

No

If the qualification is not regulated by Ofqual, the organisation owning the qualification must be OfS regulated. This is typically the case of qualifications from Higher Education Providers. For organisations which are Ofqual regulated, the specific qualification must be on the Ofqual register for the application to be progressed. The form will not prevent continuing if this is not completed, but your application cannot be progressed by the approval managers following submission if the awarding organisation is regulated by Ofqual but the qualification is not.

What is the level of the qualification?

Level 4

Route and occupational standards

Route and occupational standards

Awarding bodies must demonstrate that a qualification will enable a person to demonstrate that they have attained as many of the knowledge, skills and behaviours set out in the standard as may be reasonably

expected by undertaking a course of education.

Please note:

- Qualifications will only be considered for approval against occupational standards approved by the Institute.

If qualifications have optional units or pathways, we will only approve qualifications where every possible combination of units/ pathways ensures that a learner achieves competence in at least one occupation for which there is a standard. Qualifications with optional units that do not ensure this should be redesigned or remove optional units that do not align to occupations.

Awarding bodies must fill out all sections of this form. They must also submit supporting documentation to provide evidence of the following:

- The content of the qualification (for example, the specification of content)
- Evidence of employer engagement in the development and validation of the qualification (for example this could be within the qualification design and validation documentation that was used through the development of the qualification which evidences where and how employers were involved)

Which route does the qualification fall under?

Digital

Which occupational standards are aligned to the qualification?

Software developer/Level: 4

Attach documents

Please attach the following documents:

- The content of the qualification (for example, the specification of content)
- Evidence of employer engagement in the development and validation of the qualification (for example this could be within the qualification design and validation documentation that was used through the development of the qualification which evidences where and how employers were involved)

Software developer

Software developer

Knowledge, skills and behaviours coverage within the qualification

Please identify which knowledge, skill and behaviour statements from the occupational standard are covered within the qualification.

Where knowledge, skill and behaviour statements are covered, please provide a reference to the qualification content. This should be a unit or module reference along with associated page/paragraph/line numbers (as appropriate) in the attached specification. Please be as specific as possible which content in the qualification aligns to the statement in the standard.

Where knowledge, skill or behaviour statements are partially covered or not covered, you will be asked to provide a rationale for the exclusion of this content from the qualification. The employer engagement evidence provided should support this rationale.

The following questions assess how knowledge, skill and behaviour statements from the occupational standards are covered within the qualification.

This page has automatically generated an item for each knowledge, skill and behaviour statement (KSB) contained within the chosen standard. So please do not remove or add any further KSBs, as it requires the exact number.

KSBgenerator

KSB

KSB 1

K1 All stages of the software development life cycle (what each stage contains, including the inputs and outputs).

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 1

Analysis & Design
Prof Dev for Industry
Comp Sci Programming

KSB 2

K2 Roles and responsibilities within the software development lifecycle (who is responsible for what).

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 2

Systems Analysis & Design Systems
Analysis & Design
Prof Dev for Industry
Comp Sci Programming

KSB 3

K3 The roles and responsibilities of the project life cycle within your organisation, and your role.

Is the statement covered within the qualification?

Not covered

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

Not applicable as the students are not in employment the optional placement or project would provide some knowledge of this & further detail included in the mapping explanation doc page 2

KSB 4

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

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification
Prof Dev for Industry
Essential Skills - Web
Comp Sci Programming

KSB 5

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

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 2

Systems Analysis & Design Systems

Analysis & Design

KSB 6

K6 How teams work effectively to produce software and how to contribute appropriately.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 3

Systems Analysis & Design

Prof Dev for Industry

Foundations - Python

Comp Sci Programming

KSB 7

K7 Software design approaches and patterns, to identify reusable solutions to commonly occurring problems.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification

Systems Analysis & Design

Essential Skills - Web

KSB 8

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.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 3

Prof Dev for Industry

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

This would require a real working environment to be fully covered. It is to a extent by the Professional Development for Industry module covers some aspects of this through the guest lectures, in particular the

BCS code of conduct.

KSB 9

K9 Principles of 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.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following modules specification & further detail included in the mapping explanation doc page 3

Foundations - Python

Comp Sci Programming

Web-based Programming

KSB 10

K10 Principles and uses of relational and non-relational databases

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 4

Systems Analysis & Design

KSB 11

K11 Software designs and functional/technical specifications

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 4

Foundations - Python

KSB 12

K12 Software testing frameworks and methodologies

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 4

Foundations - Python

Comp Sci Programming

KSB 13

S1 Create logical and maintainable codes.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 4

Foundations - Python

Essential Skills - Web

Comp Sci Programming

Web-based Programming

KSB 14

S2 Develop effective user interfaces.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 4

Essential Skills - Web

Comp Sci Programming

Web-based Programming

KSB 15

S3 Link code to data sets.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Foundations - Python

Comp Sci Programming

Web-based Programming

KSB 16

S4 Test code and analyse results to correct errors found using unit testing.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included

in the mapping explanation doc page 5
Comp Sci Programming

KSB 17

S5 Conduct a range of test types, such as Integration, System, User Acceptance, Non-Functional, Performance and Security testing.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Foundations - Python

Essential Skills - Web

Web-based Programming

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

Whilst some of these are covered at a high-level in the modules, they would need a real development environment provided by a workplace to fully achieve these. The optional placement or project will provide some of these skills. Knowledge of these are covered in the Systems Analysis and Design module.

KSB 18

S6 Identify and create test scenarios.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Foundations - Python

Essential Skills - Web

Comp Sci Programming

Web-based Programming

KSB 19

S7 Apply structured techniques to problem solving, can debug code and can understand the structure of programmes to identify and resolve issues.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Foundations - Python

Essential Skills - Web

Comp Sci Programming

KSB 20

S8 Create simple software designs to effectively communicate understanding of the program.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Foundations - Python

Comp Sci Programming

Web-based Programming

KSB 21

S9 Create analysis artefacts, such as use cases and/or user stories.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Systems Analysis & Design

KSB 22

S10 Build, manage and deploy code into the relevant environment.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 5

Foundations - Python

Essential Skills - Web

Comp Sci Programming

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

Building code in relevant environments is covered in the programming modules, but managing and deploying code would require a real development environment provided by a workplace. The optional placement or project will provide some of these skills.

KSB 23

S11 Apply an appropriate software development approach according to the relevant paradigm (for example object oriented, event driven or procedural).

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 6

Systems Analysis & Design

Comp Sci Programming

Web-based Programming

KSB 24

S12 Follow software designs and functional/technical specifications.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 6

Foundations - Python

Comp Sci Programming

KSB 25

S13 Follow testing frameworks and methodologies.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 6

Essential Skills - Web

Comp Sci Programming

Web-based Programming

KSB 26

S14 Follow company, team or client approaches to continuous integration, version and source control.

Is the statement covered within the qualification?

Not covered

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

This requires a real working environment as company/team/client approaches are needed. Further detail included in the mapping explanation doc page 6

KSB 27

S15 Communicate software solutions and ideas to technical and non-technical stakeholders.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail is included in the mapping explanation doc page 6

Foundations - Python
Essential Skills - Web
Comp Sci Programming
Web-based Programming

KSB 28

S16 Apply algorithms, logic and data structures.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail is included in the mapping explanation doc page 6

Comp Sci Programming
Web-based Programming

KSB 29

S17 Interpret and implement a given design whilst remaining compliant with security and maintainability requirements.

Is the statement covered within the qualification?

Not covered

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

This requires a real working environment to provide the requirements for compliancy and maintainability. Further detail is included in the mapping explanation doc page 7

KSB 30

B1 Works independently and takes responsibility. For example, has a disciplined and responsible approach to risk, and stays motivated and committed when facing challenges.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail is included in the mapping explanation doc page 7

Systems Analysis & Design
Prof Dev for Industry
Foundations - Python
Foundations - Tech

KSB 31

B2 Applies logical thinking. For example, uses clear and valid reasoning when making decisions related to undertaking work instructions.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 7

Systems Analysis & Design

Foundations - Python

Foundations - Tech

Essential Skills Numeracy/Data Analysis

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

Whilst this is covered to a extent to solve the programming problems set within teaching and coursework, this cannot be fully covered in the university environment as there is limited scope for decision making.

KSB 32

B3 Maintains a productive, professional and secure working environment.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further is detail included in the mapping explanation doc page 7

Essential Skills - Web

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

The coursework submissions and interaction with staff and other students will cover this to a certain extent, but would need a real working environment to fully demonstrate this as it is not possible to assess the students, when working from home.

KSB 33

B4 Works collaboratively with a wide range of people in different roles, internally and externally, with a positive attitude to inclusion & diversity.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail is included in the mapping explanation doc page 7

Systems Analysis & Design

Prof Dev for Industry

Essential Skills - Web

Please provide an explanation for the omission or partial coverage of this statement from the

qualification.

Whilst students will have to work with groups of their peers, this cannot be fully covered in a university environment as it requires a wider range of possible collaborators.

KSB 34

B5 Acts with integrity with respect to ethical, legal and regulatory ensuring the protection of personal data, safety and security.

Is the statement covered within the qualification?

Partially covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 8

Systems Analysis & Design

Prof Dev for Industry

Essential Skills - Web

Please provide an explanation for the omission or partial coverage of this statement from the qualification.

The NTU Student Code of Conduct covers this from a university perspective, but not from a workplace perspective.

KSB 35

B6 Shows initiative for solving problems within their own remit, being resourceful when faced with a problem to solve.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 8

Systems Analysis & Design

Prof Dev for Industry

Foundations - Python

Foundations - Tech

KSB 36

B7 Communicates effectively in a variety of situations to both a technical and nontechnical audience.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 8

Systems Analysis & Design

Prof Dev for Industry

KSB 37

B8 Shows curiosity to the business context in which the solution will be used, displaying an inquisitive approach to solving the problem. This includes the curiosity to explore new opportunities, and techniques; the tenacity to improve methods and maximise performance of the solution; and creativity in their approach to solutions.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 8

Foundations - Python

Comp Sci Programming

KSB 38

B9 Demonstrates creativity and tenacity in their approach to solutions and the methods used to come to a solution for example, sees the task through to the end by devising new solutions and despite obstacles and problems along the way.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 8

Systems Analysis & Design

Prof Dev for Industry

Foundations - Python

Essential Skills - Web

KSB 39

B10 Committed to continued professional development.

Is the statement covered within the qualification?

Fully covered

Where within the qualification is the statement covered?

The statement is covered in section 11&13 of the following module specification & further detail included in the mapping explanation doc page 9

Prof Dev for Industry

Essential Skills - Web

Additional occupationally relevant content

Additional occupationally relevant content

Item 1

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the

qualification can include additional occupationally relevant content which is deemed of value to employers. Awarding bodies are asked to justify any content that does not directly align to the occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

Unit or module containing additional content
Essential Skills (Numeracy/Data Analysis strand)

Please give a short description of the additional content
Aspects of numeracy//Data Analysis needed to underpin a career in a technical career

Where within the qualification is the additional content covered?
Section 13&11 of this module

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.
Students entering with a higher level of maths will be streamed to the Data Analysis pathway where more advanced maths focused on web data analytics will challenge them in an occupationally relevant way. See Additional Occupationally Relevant doc

Item 2

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the qualification can include additional occupationally relevant content which is deemed of value to employers. Awarding bodies are asked to justify any content that does not directly align to the occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

Unit or module containing additional content
Term 1 Essential Skills module

Please give a short description of the additional content
This content covers key aspects of numeracy

Where within the qualification is the additional content covered?
Section 13&11 of this module

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.
A functional level of numeracy is required for technical careers, and to provide a foundation for more complex modules in further study. See Additional Occupationally Relevant document page 1

Item 3

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the qualification can include additional occupationally relevant content which is deemed of value to

employers. Awarding bodies are asked to justify any content that does not directly align to the occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

Unit or module containing additional content

Essential Skills (Prof Dev Strand)

Please give a short description of the additional content

These skills are important for future study both in the workplace and formal education

Where within the qualification is the additional content covered?

Section 13&11 of this module

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.

Writing skills will help with documentation and project proposals in employment. See Additional Occupationally Relevant document page 1

Item 4

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the qualification can include additional occupationally relevant content which is deemed of value to employers. Awarding bodies are asked to justify any content that does not directly align to the occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

Unit or module containing additional content

Foundations of Computing Technology and Programming (Technology Strand)

Please give a short description of the additional content

This content covers how systems work at a low-level (hardware)

Where within the qualification is the additional content covered?

Section 13&11 of this module

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.

It allows for a deeper understanding of how computer programs work. See Additionally Occupationally Relevant document page 1

Item 5

As well as the content aligned to the knowledge, skills and behaviours in the occupational standard, the qualification can include additional occupationally relevant content which is deemed of value to employers. Awarding bodies are asked to justify any content that does not directly align to the

occupational standard, using evidence from employers.

Content should be identified at a unit or modular level and each item should be added separately by using the Add Item button. If the qualification does not include any additional content, please leave this section blank.

Unit or module containing additional content

Professional Development for Industry (Prof Dev strand)

Please give a short description of the additional content

This content covers transferable skills

Where within the qualification is the additional content covered?

Section 13&11 of this module

Please provide an explanation of how the content is relevant to the occupation, including evidence from employers that supports its inclusion in the qualification.

It covers skills and information for employment, such as creating a CV and commercial awareness. See Additional Occupationally Relevant document page 1

Assessment methods

Assessment methods

Please confirm that the assessment covers all of the content relevant to the knowledge, skills and behaviours in the occupational standard.

Yes

Please outline the methods used to assess the content and provide a rationale for why these methods are valid for the qualification.

Assessment Rationale

The ethos of combining theory and practice is strongly reflected in the nature of assessments. A diverse range of assessment methods are used to ensure students are afforded every opportunity to demonstrate the wide range of knowledge, skills and competences they have developed as a result of their learning experience. The assessment activities used are aligned with the module learning outcomes and usually take the form of coursework or examinations. Coursework assessments typically require students, individually or in groups, to undertake practical work together with evaluation and reflection, in order to demonstrate the link between theory and practice. The variety of assessment allows for the core skills and knowledge to be demonstrated and assessed whilst also allowing for flexibility, creativity and the demonstration of more advanced knowledge through project work. For example:

Class tests and exams: this type of assessment allows students to demonstrate their knowledge and understanding of the topics and key concepts under timed conditions

Project work gives students a chance to 'do it for real' and solve the kinds of problems they would face in industry, with topics being set by employers. It provides a forum in which students can apply and expand their knowledge and demonstrate higher level skills. Students also have the freedom within their projects to apply the creativity that they will be required to use in the workplace to meet briefs set by customers and solve problems. This type of assessment allows for the full range of skills set out in the standard to be

assessed including those relating to analysis, design, development and testing. The outputs of project work include reports and demonstrations.

Coursework is a mixture of individual and group work. For group work students are required to work with their peers which supports the development and assessment of the behaviours set out in the standard. Students will have an individual grade dependent on their individual contribution to the task. The range of outputs includes reports, group presentations and group presentation at a poster conference.

The University has robust processes in place to ensure validity, manageability reliability and comparability in assessments and to minimise bias. All coursework information is provided in a standard Coursework Specification template, which includes information on requirements, marking criteria, submission, and support. Each element of coursework is assigned a moderator, and goes through a two-stage moderation process. Before the coursework is released to students, details related to the assessment (e.g., clarity of information and assessment criteria) are looked at and any issues flagged to the assessor for amendment. The grades awarded, and the feedback, are checked by the module team for consistency and fairness across the cohort for the piece of work submitted. Exam scripts are scrutinised by the course team before being given to students, and formal exams are marked and moderated anonymously. This ensures reliability and comparability, and also minimises bias.

Assessment methods have been tested for validity through consultation with a range of peers, including employers and the external examiner for the course. Constructive alignment between course, module and learning outcomes is scrutinised as part of course approval by a group of experts in teaching and learning and subject matter experts.

We ensure that assessment is applied in an occupationally relevant context and supports and prepares learners for entry into the workplace through:

a mixture of theoretical and practical work use of industry-standard development environments and methodologies, which are reviewed on an annual basis through consultation with external examiners and research by members of staff delivering the course. A more in-depth review is conducted every 3 years through the University's periodic course review process which involves consultation with employers and other peer reviewers.

liaison with employers to confirm that assessment appropriately prepares students for industry.

Group work allows learners to acquire essential team-working and leadership skills. Essential communication skills are demonstrated through written work and presentations. The poster conference is attended by representatives from industry who discuss the students' work with them, giving them an insight into the kinds of questions that clients are likely to ask which helps them to hone their communication skills.

Employers have been consulted to ensure that the assessment methods used in the qualification meet employer expectations.

Sample assessment material uploaded and an overview of the assessment material is included in the application narrative document

Employer engagement

Employer engagement

Please describe how employers and industry practitioners were consulted throughout the development of the qualification, including:

- the process of identifying and recruiting relevant employers
- how employers were involved in the development, review and validation of the qualification materials.

Please describe how employers and industry practitioners were consulted throughout the development of the qualification.

Process of identifying and recruiting relevant employers

The employers selected for this development are industry leaders in certain areas of software development. Not only do they employ software developers in their organisations they are also heavily involved in apprenticeship design and delivery.

These employers are very familiar and supportive of the Institute for Apprenticeships and Technical Education drive to transform technical and vocational education. Experian & Santander who we have consulted with have been involved in the development of the Data Scientist Apprenticeship standard and are very familiar with the K, S, B's relating to this standard. These employers are able to give a clear account of exactly what the course purpose and content should be including the latest Software Development Technologies ranging from Artificial Intelligence to Augmented & Virtual Reality (AR/VR) including the most relevant programming languages used across the world today. We also consulted with employers on the best progression routes possible from this programme for example to apprenticeships. We have a mix of large international employers and SME's to ensure we receive feedback from both perspectives.

We have created a development group that consists of the following employers:

Members of the Development Group

- Experian
- Derby College Group
- Santander
- Nottingham Trent University
- Nottingham College

Narrative and evidence of our employer consultation is evidence below, and include a full account of the consultation and validation events.