



Digital Industries Apprenticeship

Level 3 SOFTWARE DEVELOPMENT TECHNICIAN

Standards ST0128/AP01

Role Profile

A Software Development Technician typically works as part of a software development team, to build simple software components (whether web, mobile or desktop applications) to be used by other members of the team as part of larger software development projects. They will interpret simple design requirements for discrete components of the project under supervision. The approach will typically include implementing code, which other team members have developed, to produce the required component. The Software Development Technician will also be engaged in testing that the specific component meets its intended functionality.

Entry Requirements

Individual employers will set the selection criteria, but this is likely to include 5 GCSEs (especially English, mathematics and a science or technology subject); other relevant qualifications and experience; or an aptitude test with a focus on IT skills.

On Programme Assessment

Technical knowledge and understanding is assessed on programme through a combination of Ofqual-regulated Knowledge Modules and specified vendor and professional qualifications. These must be passed before the end point assessment can take place.

End Point Assessment

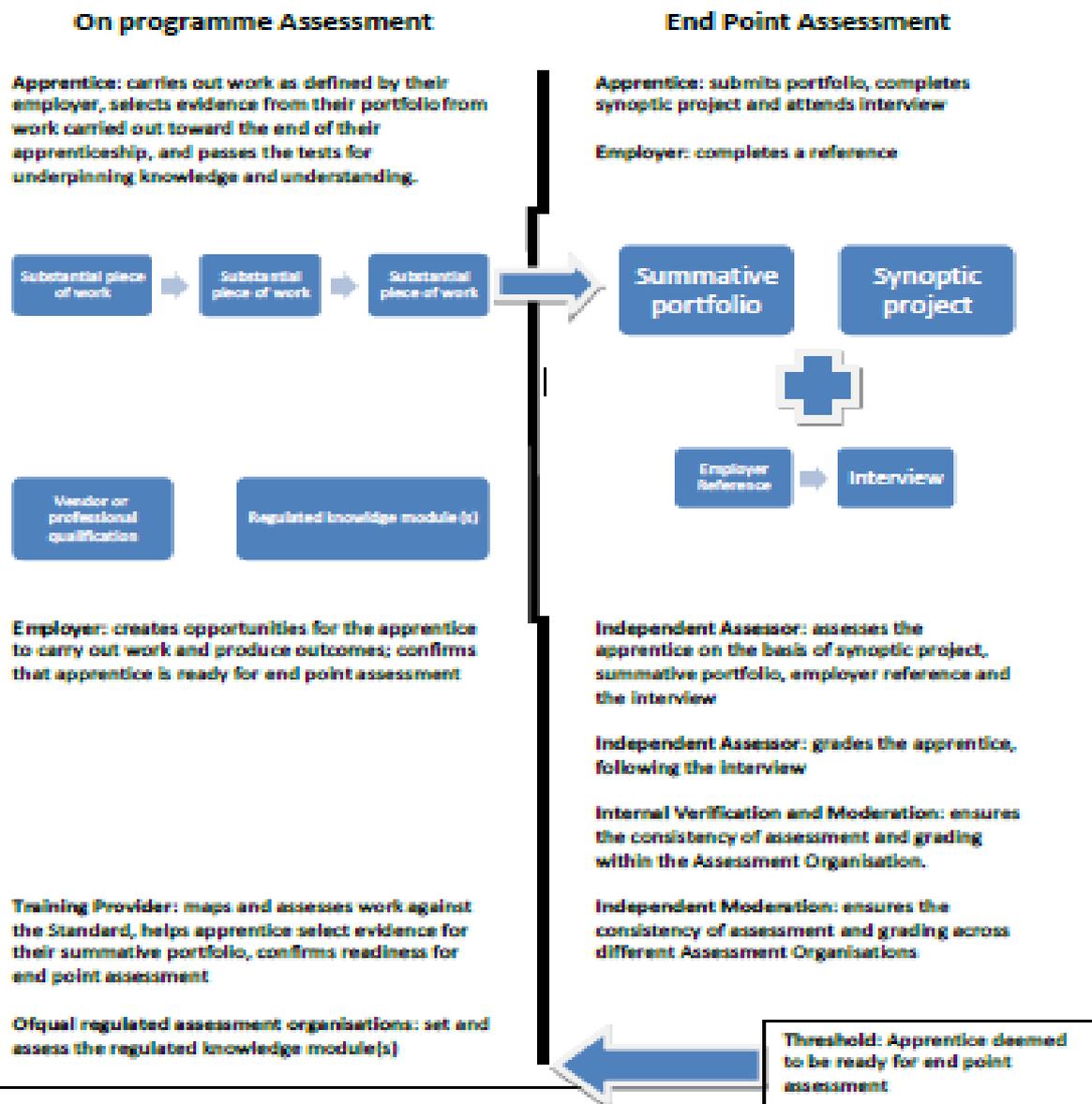
The final, end point assessment is completed in the last few months of the apprenticeship. It is based on

- a portfolio – produced towards the end of the apprenticeship, containing evidence from real work projects which have been completed during the apprenticeship, usually towards the end, and which, taken together, cover the totality of the standard, and which is assessed as part of the end point assessment
- a project - giving the apprentice the opportunity to undertake a business-related project over a one-week period away from the day to day workplace
- an employer reference
- a structured interview with an assessor - exploring what has been produced in the portfolio and the project as well as looking at how it has been produced

An independent assessor will assess each element of the end point assessment and will then decide whether to award successful apprentices with a pass, a merit or a distinction.

The approach is illustrated in the following diagram and then described in detail in the rest of the paper.

Delivery Module



On-Programme Assessment of Knowledge and Technical Understanding Apprentices will have their Knowledge and Technical Understanding formally assessed at relevant times during their apprenticeship. These assessments will be via approved vendor or professional qualification(s) and/or regulated knowledge modules. Apprentices must achieve one internationally recognised vendor or professional qualification, which will exempt one of the knowledge modules.

The content of the Knowledge Modules is summarised below, and further details are contained in the Occupational Brief, available from the Tech Partnership at www.thetechpartnership.com/apprenticeship/networkengineer.

Details of the recognised vendor and professional qualifications, and the knowledge module it exempts, are also set out below.

Knowledge Modules Vendor or Professional Qualifications	Knowledge Modules Vendor or Professional Qualifications
Knowledge Module 1: Software Development Context and Methodologies (for level 3 Software Development Technician)	N/A
Knowledge Module 2: Programming (for level 3 Software Development Technician)	N/A

Individual employers will select which vendor or professional qualification the apprentice should take. The Knowledge Modules and vendor/professional qualifications can be taken at any time whilst the apprentice is on programme to ensure relevance to the job role and to maximise the impact of learning. The training provider and employer will agree which combination of qualifications and modules will be taken and will agree the schedule for these assessments. The Knowledge Modules and vendor/professional qualification must be passed before end point assessment. Wherever possible each Knowledge Module will be capable of on-line assessment

Threshold Assessment

The decision as to when an apprentice is ready to cross the threshold from learning and formative assessment into the end point assessment phase will be made by the employer and the training provider based on their monitoring of apprentices' progress. In order to move into the end point assessment phase apprentices will need to have passed all the knowledge modules and/or vendor or professional qualifications and be able to produce a portfolio for end point assessment.

End Point Assessment

The end point assessment includes an assessment of all the requirements of the standard, including, competencies, knowledge and behaviours. It takes place in the final few months of the apprenticeship, using four assessment methods:

- Summative portfolio
- Synoptic project
- Employer reference
- Interview

The use of a variety of assessment methods in the final end point assessment ensures that the assessment of each apprentice is based on their performance and reflects accurately the quality of their work and the application of skills, knowledge and behaviours specified in the standards. Taken together, these components of the final end point assessment build a cumulative picture of performance against the standard, enabling the independent assessor to make a holistic judgement about how well the apprentice meets or exceeds the standard.

Summative portfolio

In the summative portfolio apprentices present evidence from real-work projects, illustrating the application of all the knowledge, skills and behaviours set out in the standard. This is produced towards the end of the apprenticeship with evidence from projects that have been completed, usually, towards the end of the apprenticeship. The portfolio is assessed as part of the end point assessment, and is not formally assessed whilst on programme. The portfolio is not evidence that the learning has taken place, but is evidence that the apprentice has applied that learning in a holistic and coherent way.

The evidence contained in the portfolio will comprise a small number of complete and/or discrete pieces of work which, together, cover the totality of the Standard. It will showcase their very best work, enabling them to demonstrate how they have applied their knowledge and understanding in a real-work environment to achieve real-work objectives.

Employers and training providers will assist the apprentice to assemble their portfolio to ensure that the summative portfolio is complete, that it covers the totality of the Standard and has been done to a satisfactory standard. Wherever possible, this will be an e portfolio or other electronic platform.

The evidence should be based on real work projects or outputs. The evidence can be supplemented with the following

- performance reports
- reflective accounts by the apprentice
- expert witness testimony
- customer feedback

The completed portfolio is assessed against the requirements summarised in the standard and set out in detail in the occupational brief. This is carried out by an independent assessor who makes their own judgement on the quality of the work. The independent assessor may also note particular aspects of the work that they wish to discuss with the apprentice during the interview, either to confirm their judgement and/or provide further information on which to base their grading decisions.

The evidence will be assessed against all components of the standards, i.e.:

- technical competencies;
- technical knowledge and understanding;
- underpinning skills, attitudes and behaviours.

The assessor will examine the evidence in the portfolio for:

- completeness – the evidence in the portfolio, taken together, must cover the totality of the standard
- quality – the evidence must at least satisfy the minimum requirements for each area of the standard, as defined in the Occupational Brief available from the Tech Partnership

Synoptic project

The synoptic project presents evidence from a business-related project testing the application of a selection of the knowledge, skills and behaviours defined in the standard. Each project will specify which selection of knowledge, skills and behaviours it is designed to test. The project does not need to cover every competence, but must cover a broad breadth of the competence outcomes, including the definition, design, build and implementation of a digital campaign across a variety of on-line and social media platforms.

The project is designed to assess apprentices in a consistent way, irrespective of their particular workplace and their particular role within their company, and must therefore be completed outside of day-to-day work pressures.

Assessment Organisations will develop a bank of business-related projects. Each of these projects will present a typical business task, appropriate for an SME, an IT business, a large corporate or a non-IT businesses. All of the projects will be comparable in terms of content and complexity, it is the context within which the skills and knowledge must be demonstrated that will vary. Training providers and employers will select the most appropriate project for each apprentice, based on their current job role.

Existing projects will be rotated and new ones introduced. The projects will also be designed in such a way as to ensure there is no benefit for an apprentice having prior knowledge of a project.

Each project will take, typically, four working days to complete. Apprentices will complete their project off-the-job, so that they are away from the day to day pressures of work and in a 'controlled' environment, which may be on the employer's premises or the training provider's premises. The requirements for the 'controlled environment' will include a quiet room, away from the normal place of work, with a dedicated work-station, with access to all the required equipment and with someone responsible for the controlled environment to ensure it is their own work and to respond to any questions in a consistent way.

The synoptic project is assessed by an independent assessor who makes their own judgement on the quality of the work, based on the defined knowledge, skills and behaviours it is testing against the standard, the grading criteria and the minimum requirements for each area set out in the Occupational Brief. 2

The independent assessor may also note particular aspects of the work that they wish to discuss with the apprentice during the interview, either to confirm their judgement and/or provide further information on which to base their grading decisions.

Assessment Organisations will test and trial the projects with small groups of apprentices, employers and training providers. This will ensure they are valid, reliable and comparable to the other projects, before being implemented. Assessment Organisations will monitor projects over time to ensure comparability and continuing relevance.

At least half of the projects will be available to complete on-line.

Projects will balance the need to 1) be specific to ensure consistency and comparability and 2) be sufficiently flexible to enable apprentices to apply the approaches they use in their role.

Each project will enable the following to be demonstrated

- the application of knowledge and skills to meet the project outcomes
- the approach to planning and completion of the task
- the application of the relevant behaviours

Projects will enable differentiation of performance in line with the grading criteria.

Employer Reference

The employer will provide a reference setting out their views of the quality of the apprentices work. The Assessment Organisation will provide guidance and a simple template seeking employers' comments against the grading minimum standards, criteria and dimensions, as set out in the Occupational Brief.

The employer will not be asked to grade or provide a rating, as they do not have the comparative experience or evidence.

Projects will require apprentices to document their assumptions and to highlight the consequences of those assumptions – enabling them to show their understanding of commercial pressures, and the application of their thinking and problem solving skills.

Interview

The interview is a structured discussion between the apprentice and their independent assessor, focusing on the summative portfolio and the synoptic project, with reference to the employer reference as appropriate. It covers both what the apprentice has done in terms of the standard of their work, and also how they have done it. This enables the end point assessment to include the full range of technical knowledge and competencies as well as the underpinning skills, attitudes and behaviours.

The purpose of the interview is to:

- clarify any questions the independent assessor has from their assessment of the portfolio and the project;
- explore any comments raised in the employers reference;
- confirm and validate judgements about the quality of work;
- explore aspects of the work, including how it was carried out, in more detail;
- provide further evidence for the independent assessor to make a holistic decision about the grade to be awarded.

Assessment Organisations will produce a structured brief for the independent assessor to support the discussion. This will ensure that consistent approaches are taken and that all key areas are appropriately explored.

The interview will cover

- what they submitted in the portfolio
- what they produced in the project
- the standard of their work, as evidenced in the portfolio and the project
- how they approached the work submitted in the portfolio and the project

The interview can draw on broader experience from the workplace, but the initial and the primary focus is on the work presented in the portfolio and the project.

The interview will be undertaken by an independent assessor – and it is the same assessor who has assessed the portfolio and the project (and who is approved to assess against that standard) and who will also make the grading decision

The interview will take place following the completion and assessment of the project and the portfolio. It is only after the interview has been completed that the grading decision can be taken

Grading

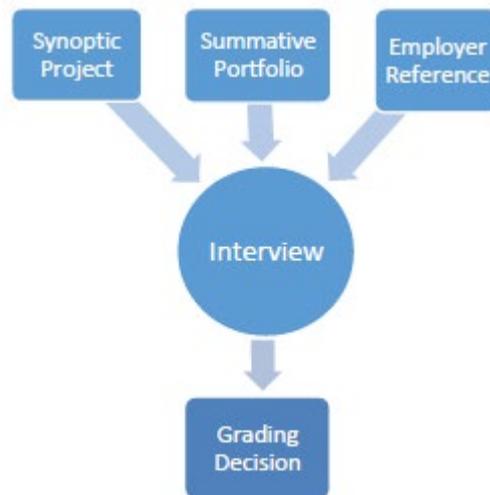
Grading takes place at the end of the apprenticeship, following the end point assessment. The output is a single grade: pass, merit or distinction for the entire apprenticeship.

Grading is done by the independent assessor, based on a holistic view of the apprentice's work and as evidenced through each of the methods of end point assessment.

The assessor will assess each of the project and the portfolio in advance of the interview, will review the employer reference, and will note any initial assessment conclusions questions to explore at interview to test these initial conclusions

Whilst the assessor may have some sense of the likely or potential grade, this initial and partial assessment conclusion is not communicated as the grading decision cannot be made before all the evidence has been assessed, including the evidence gained at the interview.

The interview enables the outputs from the project and the portfolio to be explored in more detail – in terms of what was produced and how it was produced, and to address the questions previously identified and to validate, test and amend initial assessment conclusions



The grading decision interview. The made on the basis of the totality of including the in mind that

is made after the grading decision is a holistic assessment of evidence presented - interview itself, bearing

The bulk of this evidence is contained in the portfolio, and it is the portfolio that presents evidence against the totality of the standard

The project provides a test of how well the apprentice can perform, in a controlled and comparable environment against a selection of the competences on the standard – a check and a balance on the portfolio

The employer’s reference provides supporting evidence based on their perceptions of that apprentice within their workplace

The interview provides additional supporting evidence or clarification of the above There is one grade – and none of the elements are graded separately.

Grading criteria

The minimum requirements for a pass and the dimensions to be considered for a merit or a distinction are defined in the Occupational Brief, available from the Tech Partnership. The annex contains the criteria for a merit and distinction.

The Grading Decision

The purpose of grading is to differentiate between those apprentices whose work is at the expected level of quality against the totality of the skills, knowledge and behaviours specified in the standard and those whose work is significantly above this expected level

For a pass, each of the three sets of criteria must demonstrate at least the expected (minimum requirement) level of quality

For a merit, the What has to be significantly above the level of quality and one of either the How or the With Whom has to be significantly above the level of quality expected

For a distinction, each of the three sets of criteria must be significantly above the expected level of quality

The assessor takes a holistic judgement of whether or not their assessments demonstrate that the apprentice is “significantly above the expected level of quality” in each of these three areas and can then determine which grade should be awarded

There are three sets of criteria on which the assessment and grading is made. The three criteria are

The What: what the apprentice has shown they can do,

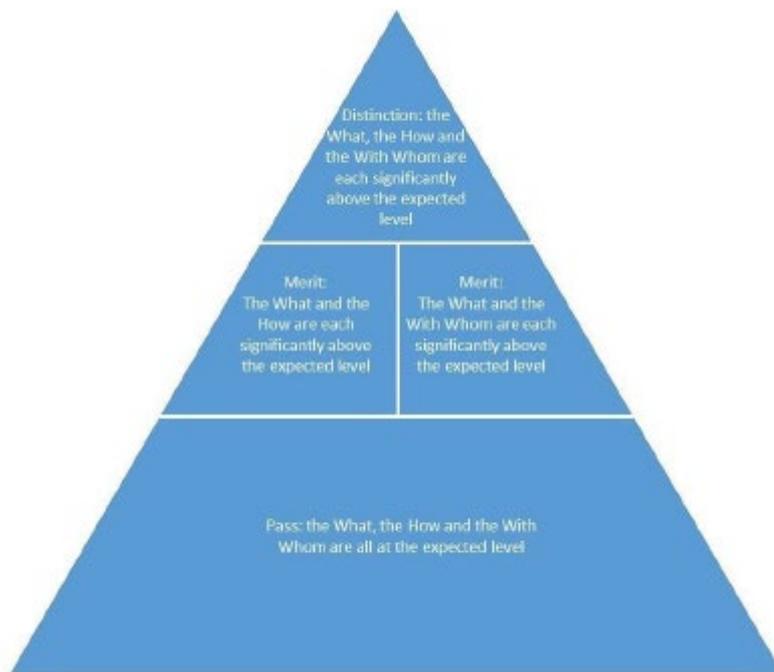
The How: the way in which the work has been done

The With Whom: The personal and interpersonal qualities the apprentice has brought to all their work relationships

Each of these three criteria has minimum (expected) requirements, which must be satisfied for a pass.

Each of these criteria has a number of dimensions which should be considered to determine if the apprentice is significantly above the minimum (expected) level of quality in this occupation.

That is, for each of the three criteria there are two levels: the expected level (as defined in the minimum requirements) and a level that is significantly above this



Times of end-point assessment are estimated as follows

- assessment of portfolio of evidence - 3.5 hours
- interview - 2 hours, plus preparation, - 3.5 hours
- assessment of final project - based on the model of a practical complex project completed over five days, with one assessor covering a group of up to five apprentices, giving a cost of 1 day of assessment per apprentice grading

Portfolio layout Guide

Section 1 –

- Personal information (CV) or linked in Profile page
- Skill-Scan
- Learning Styles questionnaire

Gateway evidence

- GCSE or Functional Skills (Level 2)
- X 2 Knowledge Module Certificate of achievement evidence
- Professional Qualification
- Gateway meeting
- Delectation

Section 2

- Standards & evidence of achievement
- Standards Achievement confirmation record

Section 3

- Assessment Feedback

Section 4

- Index
- Evidence

Technical Knowledge and Understanding	EV No:	TYPE	DATE	Sign
Understands the business context and market environment for software development				
Understands the structure of software applications				
Understands all stages of the software development lifecycle				
Understands the role of configuration management and version control systems and how to apply them				
Understands how to test their code (e.g. unit testing)				
Recognises that there are different methodologies that can be used for software development				
Understands the particular context for the development platform (whether web, mobile, or desktop applications)				
Understands their role within their software development team				
Understands how to implement code following a logical approach				
Understands how their code integrates into the wider project				
Understands how to follow a set of functional and non-functional requirements				
Understands the end user context for the software development activity				
Understands how to connect their code to specified data sources				
Understands database normalisation				
Understands why there is a need to follow good coding practices				
Understands the principles of good interface design				
Understands the importance of building in security to software at the development stage				
Understands the business context and market environment for software development				

Standards Achievement confirmation record:	Start date:	End date:
This is to confirm that the name person has achieved sufficient evidence to demonstrate a safe and sound knowledge and understanding:		
Candidate Summary of achievement supporting Statement:		
Training provider Summary of achievement supporting Statement		
Candidate Print name:	Sign:	
Assessor print name:	Sign:	
IQA print name:	Sign:	

Technical Knowledge and Competencies	EV No:	TYPE	DATE	Sign
Logic: writes simple code for discrete software components following an appropriate logical approach to agreed standards (whether for web, mobile or desktop applications)				
Security: applies appropriate secure development principles to specific software components all stages of development				
Development support: applies industry standard approaches for configuration management and version control to manage code during build and release				
Data: makes simple connections between code and defined data sources as specified Test: functionally tests that the deliverables for that component have been met or not				
Analysis: follows basic analysis models such as use cases and process maps				
Development lifecycle: supports the Software Developers at the build and test stages of the software development lifecycle				
Quality: follows organisational and industry good coding practices (including those for naming, commenting etc.)				
Problem solving:				
Solves logical problems, seeking assistance when required (including appropriate mathematical application)				
Responds to the business environment and business issues related to software development				
Communication: clearly articulates the role and function of software components to a variety of stakeholders (including end users, supervisors etc.)				
Operates appropriately in their own business's, their customers' and the industry's environments				
User Interface: develops user interfaces as appropriate to the organisations development standards and the type of component being developed				

Standards Achievement confirmation record:	Start date:	End date:
This is to confirm that the name person has achieved sufficient evidence to demonstrate a safe and sound knowledge and competencies:		
Candidate Summary of achievement supporting Statement:		
Training provider Summary of achievement supporting Statement		
Candidate Print name:	Sign:	
Assessor print name:	Sign:	
IQA print name:	Sign:	

Underpinning Skills, Attitudes and Behaviours	EV No:	TYPE	DATE	Sign
Logical and creative thinking skills				
Problem solving skills				
Ability to work independently and to take responsibility				
Can use own initiative				
A thorough and organised approach				
Ability to work with a range of internal and external people				
Ability to communicate effectively in a variety of situations				
Maintains productive, professional and secure working environment				

Standards Achievement confirmation record:	Start date:	End date:
This is to confirm that the name person has achieved sufficient evidence to demonstrate a safe and sound Underpinning Skills, Attitudes and Behaviours		
Candidate Summary of achievement supporting Statement:		
Training provider Summary of achievement supporting Statement		
Candidate Print name:	Sign:	
Assessor print name:	Sign:	
IQA print name:	Sign:	

Qualifications Summary of Achievement

Apprentices must achieve one internationally recognised vendor or professional qualification, from the bottom column in the table below. This then exempts one of the Ofqual-regulated knowledge modules, as shown in the top column.

Knowledge Modules	Pick 2 – the option you don't pick you must pick from the vendor list	Tick what is to be achieved	Date achieved
Knowledge Module 1: Software Development Context and Methodologies (for level 3 Software Development Technician)	Option 1		
Knowledge Module 2: Programming (for level 3 Software Development Technician)	Option 2		
Functional Skills level 2 or equivalent			
Maths			
English Reading			
English Writing			
English SLC			
ICT			

	Technical Knowledge and Understanding	PO	PR	EM	IN
1	Understands the business context and market environment for software development	✓		✓	✓
2	Understands the structure of software applications	✓	✓	✓	
3	Understands all stages of the software development lifecycle	✓	✓	✓	
4	Understands the role of configuration management and version control systems and how to apply them	✓	✓	✓	
5	Understands how to test their code (e.g. unit testing)	✓	✓	✓	
6	Recognises that there are different methodologies that can be used for software development	✓		✓	✓
7	Understands the particular context for the development platform (whether web, mobile, or desktop applications)	✓	✓	✓	
8	Understands their role within their software development team	✓		✓	✓
9	Understands how to implement code following a logical approach	✓	✓	✓	
10	Understands how their code integrates into the wider project	✓	✓	✓	✓
11	Understands how to follow a set of functional and non-functional requirements	✓		✓	✓
12	Understands the end user context for the software development activity	✓		✓	✓
13	Understands how to connect their code to specified data sources	✓	✓		
14	Understands database normalisation	✓		✓	✓
15	Understands why there is a need to follow good coding practices	✓		✓	✓
16	Understands the principles of good interface design	✓		✓	✓
17	Understands the importance of building in security to software at the development stage	✓	✓	✓	✓
18	Understands the business context and market environment for software development	✓	✓		✓

	Technical Knowledge and Competencies	PO	PR	EM	IN
1	Logic: writes simple code for discrete software components following an appropriate logical approach to agreed standards (whether for web, mobile or desktop applications)	✓	✓	✓	
2	Security: applies appropriate secure development principles to specific software components all stages of development	✓	✓	✓	
3	Development support: applies industry standard approaches for configuration management and version control to manage code during build and release	✓	✓		✓
4	Data: makes simple connections between code and defined data sources as specified Test: functionally tests that the deliverables for that component have been met or not	✓	✓	✓	
5	Analysis: follows basic analysis models such as use cases and process maps	✓	✓	✓	
6	Development lifecycle: supports the Software Developers at the build and test stages of the software development lifecycle	✓	✓		✓
7	Quality: follows organisational and industry good coding practices (including those for naming, commenting etc.)	✓	✓	✓	
8	Problem solving:	✓	✓	✓	
9	Solves logical problems, seeking assistance when required (including appropriate mathematical application)	✓	✓	✓	
10	Responds to the business environment and business issues related to software development	✓		✓	
11	Communication: clearly articulates the role and function of software components to a variety of stakeholders (including end users, supervisors etc.)	✓	✓	✓	
12	Operates appropriately in their own business's, their customers' and the industry's environments	✓	✓	✓	
13	User Interface: develops user interfaces as appropriate to the organisation's development standards and the type of component being developed	✓	✓	✓	

	Underpinning Skills, Attitudes and Behaviours	PO	PR	EM	IN
1	Logical and creative thinking skills	✓	✓	✓	✓
2	Problem solving skills	✓	✓	✓	✓
3	Ability to work independently and to take responsibility	✓	✓	✓	✓
4	Can use own initiative	✓	✓	✓	✓
5	A thorough and organised approach	✓	✓	✓	✓
6	Ability to work with a range of internal and external people	✓	✓	✓	✓
7	Ability to communicate effectively in a variety of situations	✓	✓	✓	✓
8	Maintains productive, professional and secure working environment	✓		✓	

About the Assessment Interments:

Our Employers and Skilled experts have worked together with us to help shape the End point assessment Instruments, handbooks, Information advice and guidance.

Ofqual Level indicator

At level 3, your evidence must show that your knowledge and skills whilst carrying out a broad range of varied work activities, most of which are complex and nonroutine. Your job role will have considerable autonomy or responsibility, and often require you to manage others.

Portfolio of evidence (PO)

You will need to demonstrate, through the presentation of evidence, that you can meet the requirements of Skills, Knowledge and behaviours that you are undertaking in the standards. To do this you need to organise your evidence into what is known as a portfolio. It important that within your portfolio the standards have been met at least once before this is presented for formative assessment. It is expected that the portfolio is co-produced with the training prover, employer and the learner.

A portfolio in this context is an online or a paper based folder which holds the following:

- the assessment plans that make up your standards
- the written evidence you develop
- the attachments you upload
- the assessment feedbacks
- the gateway requirements

What sort of evidence is acceptable?

Suitable evidence can be divided into two main categories – direct and indirect.

Direct evidence can include a variety of the following:

- Your performance being observed by your assessor
- Projects or work-based assignments
- Personal reports
- Minutes of meetings, action plans, progress reports
- Internal and external correspondence
- Product evidence e.g. examples, samples, photographs
- Your responses to oral or written questions
- Video or authenticated audio tapes

It is expected that you will provide a diversity of evidence types to support your demonstration of SKB. The list above is not exhaustive.

Indirect evidence can include:

- Witness testimonies from people within or outside the organisation
- Achievement in related areas

- Attendance on courses/training activities relevant to the standards
- Membership of related committees or outside organisations

Such indirect evidence will be used mainly to support or confirm direct evidence.

Suitability of evidence

Your assessor will need to be satisfied that your evidence is:

- sufficient
- authentic
- relevant
- current

You need to ensure any evidence included in your portfolio meets these criteria.

What is sufficient?

Your evidence must cover all aspects of the assessment criteria for each standard you are seeking to achieve. Some standards require specific evidence and you should check to see what is needed. Sufficient does not mean a mass of evidence. It simply means collecting enough evidence to demonstrate competence.

What is authentic?

You must be able to explain and substantiate the evidence you put forward. It is important, therefore, to ensure you only submit evidence relating to your own performance. There is also a declaration that is completed at the end of your standards to confirm your evidence is authentic.

What is relevant?

Any evidence must relate clearly to the standard you are seeking to achieve. Assessors are only interested in evidence directly related to the requirements set out in the standards. That is, evidence which clearly links a learner's performance with specific areas of their chosen standard. You should avoid the inclusion of reference documents, training materials and other evidence that does not demonstrate competence.

What is current?

'Current' means evidence relating to skills, attitudes and knowledge you can currently demonstrate. Your assessor will be assessing your current level of competence, so you must ensure that your evidence clearly relates to activities and areas of work you could still perform if required to do so.

Your assessor can help you to determine what is sufficient, authentic, relevant and current.

Summary of portfolio use

Whilst your portfolio will take effort and time to complete, it is also a means of focusing and demonstrating your strengths and achievements to others.

It should develop along with your achievements and take on a dynamic role as:

- a full record of achievements to date
- proof of your competence and knowledge
- a full resource bank of your abilities
- a reference tool for staff appraisal
- a basis for career development
- a record of your continuing professional development

In relation to your portfolio it provides:

- a clear demonstration of your Skills, knowledge and behaviours against Software Development Technician standards
- a focus for your assessment
- a means to bring together evidence for more than one section
- a focus for the identification of training/learning needs

Remember...

Your portfolio will not only help you as you work towards your current standards...but will also provide you with a useful reference tool for your future career.

The Employers reference (EM)

What will it cover: - Please see the ST0128 Software Development Technician Matrix for the standards to be achieved as a minimum

The employer will provide a reference setting out their views of the quality of the apprentice's work. ECQN Ltd will provide guidance and a simple template seeking employers' comments against the grading minimum standards, criteria and dimensions, as set out in the Occupational Brief. The employer will not be asked to grade or provide a rating, as they do not have the comparative experience or evidence.

Your assessor will need to be satisfied that your evidence is:

- sufficient
- authentic
- relevant
- current

We need to ensure evidence included in the end point exam meets the required standard.

Interview (IN)

The interview is a structured discussion between the apprentice and their independent assessor, focusing on the summative portfolio and the synoptic project, with reference to the employer reference as appropriate. It covers both what the apprentice has done in terms of the standard of their work, and also how they have done it.

This enables the end-point assessment to include the full range of technical knowledge and competencies as well as the underpinning skills, attitudes and behaviours.

The interview will be undertaken by an independent assessor – and it is the same assessor who has assessed the portfolio and the project (and who is approved to assess against that standard) and who will also make the grading decision

Project (PJ)

The project presents evidence from a business-related project testing the application of a selection of the knowledge, skills and behaviours defined in the standard. Each project will specify which selection of knowledge, skills and behaviours it is designed to test. The project will not cover every competence but will cover a broad breadth of the competence outcomes, including the design, planning and implementation of a Software Development Technician skills.

Each project will take, typically, five working days to complete. Apprentices will complete their project off-the-job, so that they are away from the day to day pressures of work and in a 'controlled' environment, which may be on the employer's premises or the training provider's premises. The requirements for the 'controlled environment' will include a quiet room, away from the normal place of work, with a dedicated work-station, with access to all the required equipment and with someone responsible for the controlled environment to ensure it is their own work and to respond to any questions in a consistent way.

Internal Quality Assurance Procedure

Role of the Internal Quality Assurer

The Internal Quality Assurer is an important role as it maintains and monitors the quality and assurance of standards and its elements relation to monitoring activities.

Within the role, the Internal Quality Assurer is expected to:

- o. Develop and follow internal policies, procedures and documentation for the carrying out and maintenance of quality systems in line with End point assessment requirements for the Portfolio
- p. Ensure all Assessors hold and maintain the required qualifications and occupational expertise to deliver the standards they have been assigned to when judging the evidence
- q. Provide support to Assessors in relation to procedures and policies for the delivery of the Standards
- r. Identify training needs and provide ongoing training to Assessors to continually improve the standard of Standards
- s. Co-ordinate the timely registration for learners with ECQN Ltd
- t. Maintain appropriate records of quality assurance, assessment.
- u. Ensure sampling plans consider the ratio of learners per Assessor per Standard to meet the quality assurance requirements to cover all SKB delivered within a 12-month period
- v. Facilitate standardisation activities to support the continuous improvement of Standards
- w. Ensure all assessment documentation, maintained by Assessors, is complete, up-to-date and legible
- x. Ensure conflicts of interest are identified and addressed, including not allowing the quality assurance of own assessment work or cross quality assurance where two people quality assure each other's work
- y. Conduct observations of Assessors conducting the assessment process
- z. Conduct learner interviews to monitor and analyse the quality of the assessment process and learner journey
- aa. Provide the required information to ECQN Ltd to aid and facilitate monitoring activities as required
- bb. Impart information and feedback resulting from monitoring activities and ensure all actions are addressed by the indicated timescales

Sampling Strategy

Sampling Assessments

Two forms of sampling will be carried out to ensure that quality assurance is maintained. These are:

- c. **Interim sampling:** dipping into the assessment process whilst the learner is at different stages. This ensures that the assessment of the learner is proceeding satisfactorily following the principles of plan, judge and feedback.
- d. **Summative sampling:** involves the Internal Quality Assurer reviewing the quality of the assessment decisions by the Assessor. The IQA should be able to follow an audit trail, which clearly demonstrates that the Assessor has checked the validity, authenticity, reliability, currency and sufficiency of the evidence presented.

The IQA must record and report all sampling undertaken in sufficient detail to be able to justify the decision made. IQA reports will be produced for all sampling and must be signed by both the Assessor and IQA.

Sampling plans must include sampling of all types of:

- g. Learner
- h. Assessors
- i. Methods of assessment
- j. Evidence or Elements
- k. Records
- l. Assessment sites

A sampling plan will be maintained for all samplings planned and conducted showing the following information:

- g. Learner name
- h. Standards
- i. Start date
- j. Planned end date
- k. Planned interim sampling updated to show actual sampling undertaken
- l. Planned summative sampling updated to show actual sampling undertaken
- m.

Sampling Rates

Different rates for sampling will be adopted dependent on the experience of the Assessor delivering the Standards they have been assigned to as follows:

Category	Required Activities
	100% sampling rate

Newly qualified Assessors or Assessors new to the centre or those Assessors who are continually falling short of the standard required	Assessor observation every 3-months
Assessors who are in need of development but often meet the standard required	50% sampling rate
	Assessor observation every 6-months
Assessors who are experienced with the standards they have been assigned to and continually meet the standard required	25% sampling rate
	Assessor observation every 12-months

The rates above may be subject to change for instance:

- e. Where a Standard is new to the centre the first 2 cohorts will be sampled at a 100% rate unless otherwise authorised by the ECQN Ltd
- f. Where the sampling strategy of the ECQN Ltd overrides that of the centre due to the risk rating or actions resulting from monitoring activities
- g. Where a contractual requirement requires additional sampling to take place (N.B. this will not override the requirements of the previous two instances where this sampling rate would require a lesser sampling rate to be adopted)
- h.

Standardising Assessment and Quality Assurance Judgments

Standardisation (sometimes referred to as benchmarking or moderating) is an important part of the duties of the Internal Quality Assurer.

Regular meetings will be held to conduct Standardisation exercises:

- Meetings to be held on a quarterly basis (more frequent as required or on release of new standards)
- Meetings to cover feedback from ECQN Ltd monitoring activities, assessment good practice and interpretation of standards specifications
- Meetings to cover feedback from learners as to satisfaction levels of both assessment practice and sessions attended
- Exercises using real learners' evidence to be used in order to standardise the assessment decision process

Minutes of meetings to be produced and copies kept for viewing during activities by ECQN Ltd

Managing the Quality

The systems and processes described above have been designed to maintain the quality of assessment and to ensure that we adhere to the requirements of the ECQN Ltd .

For external monitoring activities, the Internal Quality Assurer is required to have the following information readily available:

- Centre File containing all documents
- Numbers of current registered learners per standard
- Internal Quality Assurer and Assessor details – especially CVs, up to date CPD records and current Assessor caseloads
- Copies of relevant staff certificates
- Assessment records and plans
- Internal Quality Assurance sampling strategy
- Internal Quality Assurance records including feedback to Assessors, Assessor observations and learner interviews
- Learner evidence records and documentary evidence
- Records of claims for certification

The Internal Quality Assurer will be responsible for ensuring that all action points raised through Awarding Organisation monitoring activities are addressed within the specified timescale(s).

Assessor Observations

The Internal Quality Assurer will complete observations of delivery and assessment to ensure the management of the quality of the programme

- Direct observation of the Assessor in action and giving feedback on performance
- Direct observation of an Assessor's planning and review activities with learners
-

These observations will be conducted, at a minimum, on the timeframes listed earlier in this document and clear evidence of the conducting of these will be maintained for viewing by the ECQN Ltd during monitoring activities.

Evidence of the enactment of any associated actions will be recorded and kept within the quality assurance folder for viewing by the ECQN Ltd during monitoring activities.

Learner Questionnaires

The Internal Quality Assurer will complete questionnaires to gather feedback to ensure the management of the quality of the programme. These will be planned to be conducted, at a minimum, on a 6-monthly basis so that each standard is subject to learner questionnaires being conducted every 6-months.

The results of the questionnaires will be analysed and improvement plans developed and enacted in order to promote the continued improvement within the EPAO.

Copies of the analysis of results and resulting improvement plans will be kept within the quality assurance folder for viewing by the ECQN Ltd during monitoring activities.

ST0127 Network Engineer

How will you deliver the end-point assessments?

As a minimum your description should cover:

1. the number and structure of staff you will have administering end-point assessment
2. any preparatory materials you will make available to apprentices, training providers and/or employers
3. where and how you will conduct the end-point assessment
4. what IT systems you might be using to manage information about apprentices
5. how long you expect the process to take, from starting to conduct the EPA to confirming the outcome to the apprentice
6. your processes for informing the apprentice the outcome and claiming their apprenticeship certificate from the ESFA
7. Who will be the Responsible Officer for end-point assessment within your organisation?

1. The number and structure of staff you will have administering end-point assessment

We have a range of structures and departments and teams to help administer the ST0127 Network Engineer Endpoint assessment process. Our company organisation charts on flowcharts will be available online at www.ecqnlimited.co.uk.

We have our head office team:

They are responsible for, the day-to-day management and operation of the organisation for our end point services.

- HR
- Payroll, invoicing
- Marketing
- Business development.

Our quality assurance team

They are responsible for:

- Recruitment selection of staff
- Internal moderation
- Policies procedures
- Standardisation activities

Our management team are:

Regional quality assurance.

We have three RQA: they responsible for

- The Recruitment and selection of the lead independent assessor.
- The recruitment and selection of the Independent assessor
- The day today booking of end point assessment
- The day to day booking of gateway meetings
- Reporting to the Esfa the results and grades
- Monitoring and spot checking some lead independent assessment decisions

The lead independent assessor LIA they are subject specialists, and are responsible for

- The supervision of the independent assessor
- Spot checking monitoring of The Independent assessor
- Monitoring and reviewing the grades of The Independent assessor
- Carrying outline management functions of the Independent assessor

The Independent assessor is a subject specialist and are responsible for.

Carrying out the gateway meeting

- Insuring the learner is ready for Endpoint assessment
- Carrying out the Independent end point assessment
- Making an assessment decision
- Recording and reporting that independent Assessment decision.

Exams department,

Responsible for the exam's governance committee.

- The Chief Examiner is responsible for all exams and their end to end life within ECQN Ltd
- the Chief Examiner is responsible for appointing the principal examiners for developing the assessment instruments for ST0127 Network Engineer
- The Senior Officer responsible for the overall quality and integrity of ECQN Ltd.

2. Any preparatory materials you will make available to apprentices, training providers and/or employers

We also have our EPAO website this can be found at www.ecqnltd.co.uk you will find the following documents.

- Learner information pack
- Learner planner
- Mock Assessment
- Writing skills
- Employer handbook
- Your Rights
- Cost
- Fact sheet
- Common questions
- Common Errors

3. Where and how you will conduct the end-point assessment

The final, end point assessment is completed in the last few months of the apprenticeship. It is based on

- The portfolio – produced towards the end of the apprenticeship, containing evidence from real work projects which have been completed during the apprenticeship, usually towards the end, and which, taken together, cover the totality of the standard, and which is assessed as part of the end point assessment – This will be assessed online Via Our LMS, The evidence should be uploaded and assessed for our LIA & IA to assess
- The project - giving the apprentice the opportunity to undertake a business-related project over a one-week period away from the day to day workplace – This project is given on the first day if the assessment, face to face by our IA.
- The employer references – This can be completed face to face or online recorded, Once the ID and employer has been confirmed.
- The structured interview with an assessor - exploring what has been produced in the portfolio and the project as well as looking at how it has been produced
- We will have a range of options that best meet the needs of the employers and learners:
- We can use the online recoding function within our EPA system to carry out part of the assessment process. This will help reflect the learner before the face to face assessment.
- The learner could attend one of our three test centres in London, Midlands or Blackpool
- We will carry out the assessment at the employer’s address, - we will ensure that all necessary health and safety checks will be carried out before hand and the Examination checks to ensure it is a safe testing environment.

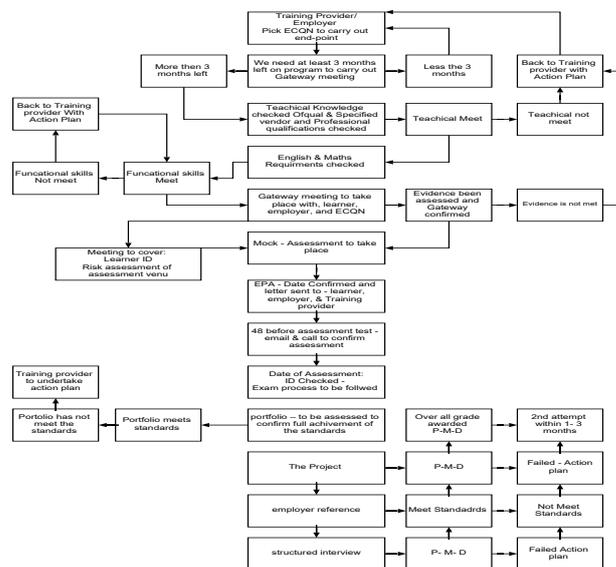
4. What IT systems you might be using to manage information about apprentices

Smart End Point Assessment (SEPA) is the first to market solution to manage the end-to-end process for End Point Assessing. Widely regarded as the technology experts in the sector, SEPA provides EPAOs with a robust process for End Point Assessing. With features such as Integrated Web Conference Rooms, managing conflicts of interest and standardisation, SEPA will not only safeguard your reputation as an EPAO, it will reduce administration costs and travel time, ensuring that you are audit compliant and giving you competitive advantage.

We also have an online CRM & LMS System to help manage the workflow, and holds the EPAO Staff files, this is also used as a tracking system.

5. How long you expect the process to take, from starting to conduct the EPA to confirming the outcome to the apprentice

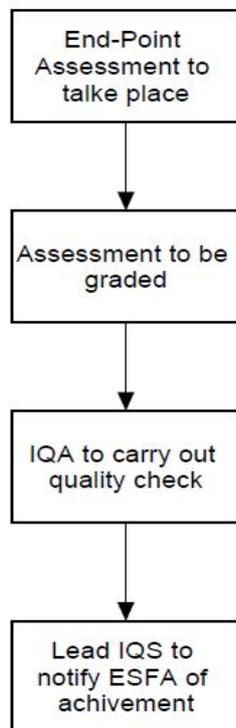
We Aim to process results within five working days, and the assessment within 3 months from engagement. This flowchart shows a typical journey for the ST0127 Network Engineer standards



6. Processes for informing the apprentice the outcome and claiming their apprenticeship certificate from the ESFA achieved their apprenticeship, so certification can take place

As you can see from our certification flow chart we have four key steps to ensuring that certification is safe and robust.

Certification flow chart



Our first step is ensuring that the Endpoint assessment is conducted in line with the examination requirements.

Within this step we will ensure that:

- The gateway requirements have been achieved
- Conflict of interest has been identified
- That's the exam is in line with regulations
- That the environment is appropriate
- The learner is ready for assessments
- Appropriate monitoring visits have taken place

Awarding the grade, will be used via the pass merit and distinction. Based on a total number of correct answers or behaviours toward degrade.

We will also have standardisation benchmarking with assessor to check the grades.

- The IQA process will ensure:
- The gateway requirements have been achieved
- The assessments decisions are safe and fair
- Address any concerns from the assessor during the assessment.
- And confirm the overall grades.

The lead internal quality system is to confirm that's the process, security and integrity of the Endpoint has not been compromised.

Once the lead IQA system has been completed we will notify the ESFA of the results using the appropriate reporting systems

7. Who will be the Responsible Officer for end-point assessment within your organisation?

Mr Marc White will be the Responsible officer, he has over 10 years' experience in educations. His strong points are compliance, Quality assurance, Systems and audits. He understands the day to day operation of running an EPAO has he has had first-hand experience in developing exams for now quite a large AO