Sheffield Hallam University

APPRENTICE EPA HANDBOOK - DIGITAL TECHNOLOGY SOLUTIONS SPECIALIST

Contents

1. INTRODUCTION

This Handbook contains a guidance for apprentices on the End-Point Assessment (EPA) for the Digital and Technology Solution Specialist Integrated Degree Apprenticeship. This should be read in conjunction with the University level EPA Handbook which sets out boarder information relating to roles and responsibilities across the full apprenticeship portfolio at the University.

The Digital and Technology Solution Specialist Integrated Degree Apprenticeship takes typically 24 months to complete with a minimum of 20% off-the-job training. Successful completion of the EPA leads to completion of the apprenticeship, which includes the MSc Digital and Technology Solution Specialist Master's Degree.

During the on-programme stage, you will develop the technical competencies, technical knowledge and understanding, underpinning professional, interpersonal and business skills, and behaviours that are necessary to operate as a fully competent Digital and Technology Solution Specialist.

During the first year of the programme, the focus is on introducing and raising awareness about the EPA. In the second year, attention shifts to identifying and documenting evidence. The evidence collected later in the programme tends to be more relevant and of higher quality.

1.1 INTEGRATION OF THE MSC AND EPA

The EPA gives you the opportunity to demonstrate that you have attained the 41 Knowledge, Skills and Behaviours (KSBs) set out in the standard. The full list of KSBs for both standards are listed in the Appendix A.

Performance in the EPA will determine your Apprenticeship grade of Pass, Merit, Distinction or Fail. It is requirement of the standard that you pass the EPA in order to be awarded the MSc.

The classifications given for the Apprenticeship and MSc are independent of each other. For example, you may gain a Merit on the Apprenticeship and a Distinction on the MSc. Both however are integrated as the MSc needs to be passed to undertake the EPA and the EPA needs to be passed to receive the MSc.

1.2 EPA REQUIREMENTS

There are two parts to the EPA:

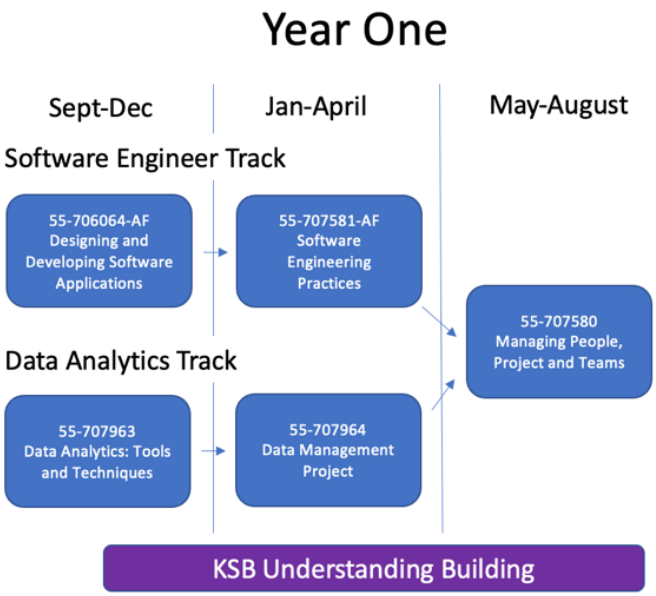
a. A Project Report - a written account of a set of practical tasks undertaken within a work-based project context), which the independent assessor assesses and grades. This is based on the original research undertaken for the final Independent Study / Consultancy Project module.
   This is used to assess 15 mainly specialist KSBs.

b. A Professional Discussion - a structured discussion with the independent assessor allowing the apprentice to respond to questions using a portfolio, which the independent assessor assesses and grades. The portfolio is centred around two STARE reports and their supporting evidence.
   This is used to assess 26 KSBs across a range of competences.

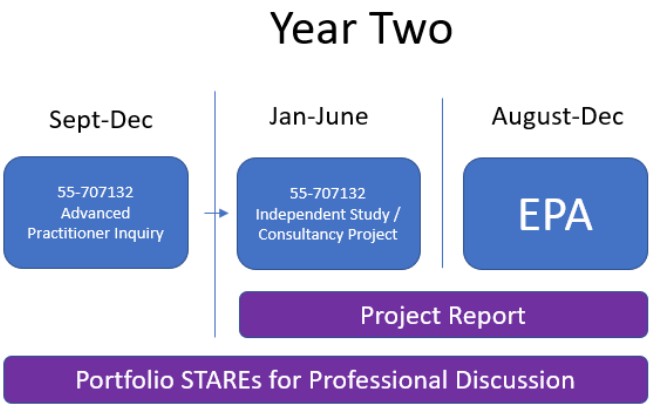
1.3 TIMELINE

The EPA Gateway can only take place after the final academic module Independent Study / Consultancy Project has been completed.

In the first year of the apprenticeship, you will have been building your KSB understanding.



In the second year you start to build your evidence base for both the Professional Discussion and Project Report.



You may pass the EPA Gateway and have your Professional Discussion at any time from August to December. The course team will check your submission documentation and send batches of ready apprentices through EPA Gateway at the end of each month between August and December.

2. PROJECT REPORT

2.1 PROJECT PROPOSAL

In the final year of the on-programme, you will undertake two modules Advanced Practitioner Inquiry (30 credit) and Independent Study / Consultancy Project (60 credit).

The Advanced Practitioner Inquiry module is designed to help you identify an appropriate topic area for the dissertation undertaken in the following module Independent Study / Consultancy Project.

The assessment task for Advanced Practitioner Inquiry module is in effect a project proposal. This project proposal is approved by the University, employers and Independent to ensure projects provide sufficient scope to meet assessment requirements.

2.2 PROJECT REPORT RELATIONSHIP TO DISSERTATION

The Independent Study / Consultancy Project dissertation is submitted at the end of June. It is this work that then forms the basis of the Project Report component of the EPA. Whereas the dissertation is an academic piece of work with credits attached, the EPA Project Report is a business style report focused on providing evidence of the 15 KSBs.

The Project Report is likely to take around two months (10 working days) to complete. This is usually done following feedback on the dissertation received in July.

2.3 PROJECT REPORT STRUCTURE

The Project Report is a 10,000 (+/- 10%) written essay in which you explicitly demonstrate all the specialism skills and knowledge as set out as Project Report PR KSBs in Appendix A.

The Project Report should cover the project terms of reference, your responsibilities, the action in planning and executing the project and results and conclusions. The report should be properly laid out as a business style report with an executive summary.

It should be structured as follows (a template document is provided):

- Executive summary: summarizes the content of the report to be comprehensible to someone who has not read the rest of the report.
- Introduction: The scope or hypothesis of the project and terms of reference, setting the scene for the remainder of the report.
- Background: A review section, describing the background work or research undertaken at the beginning of the project period. This should include a stakeholder's map.
- Work undertaken: Start from describing the work that has been undertaken in the first two paragraphs. This is the section where you explain how each KSB has been met and provide evidence or indicate which chapter of Project Report or Appendix contain the end evidence. Each KSB evaluation section should have the end evidence summary as per exemplar in the PR template.
- Outputs: A section describing the outputs, deliverables or artefacts that have been produced because of the project.
- Further work: A section describing possible ways in which the work could be continued or developed.
- Conclusions: A statement of conclusions relating to the work done, and outputs produced to the initial hypothesis and terms of reference.

- References: A formatted list of references for the project
- Appendices: The report must include an annex containing a maximum of 4 pieces of evidence relating to the project. Example evidence may include software developed, spreadsheets, databases, models and analyses etc.

DO NOT include all the dissertation appendices. You must select 4 appendices which help you to evidence your KSBs, e.g. some software code, results from findings.

DO NOT include your dissertation as an appendix, although you will use refactored elements of it.

Your background, Work Undertaken and Outcomes should be heavy on the end evidence included. In Work Undertaken section you evaluate how each of 15 KSBs has been met during the project. Each KSB should have code, descriptor, evaluation section and end evidence sum up.

A template project report will be provided for you.

2.4 PROJECT REPORT VIDEO

To aid the independent assessors when reviewing the Project Report, you should include a short (no more than 5 minute) video demonstration of the deliverable. This should be in a common video format or a link to a private video share.

2.5 PROJECT SIGN OFF

An EPA Project Report Sign Off form should be signed by yourself, your employer, the independent assessors and the University.

2.6 PROJECT FILES

The Project Report, appendices, video and sign off form should all be placed on the OneDrive share which has the folder structure and templates already populated.

3. PROFESSION DISCUSSION

3.1 PORTFOLIO AND PROFESSIONAL DISCUSSION

The Professional Discussion focuses on assessing how the core knowledge, skills and behaviours outcomes have been achieved. The work referenced in the Professional Discussion should not relate to the Project Report but other work based activities.

The purpose of the Professional Discussion is to gather sufficient evidence, primarily by discussing the work submitted in your portfolio, against all the identified knowledge, skills and behaviours. As such the portfolio provides the evidence pool around which the discussion is shaped. The Independent Assessor will have access to the portfolio prior, during and after the discussion.

There will be a minimum of four questions covering the main themes of the core skills, knowledge and behaviours (business and change management, professional competencies, leadership and technology management). The independent assessor will use the questions to verify that outcomes have been met and will explore any gaps or areas of uncertainty following their reading of the portfolio.

You use the portfolio to answer questions in the professional discussion and you may also reference other work undertaken in the workplace. The Professional Discussion will not reference the Project Report, as this evidence has already been assessed.

Both you and the independent assessor will have access to the portfolio before and during the Professional Discussion. You can also bring any additional documentation that you may want to use.

The Portfolio is placed on a One Drive folder and will follow the structure set out in the appendix C. Templates for all the key documents are provided in the folder structure created for you.

3.2 PRACTICAL REQUIREMENTS

Practical Requirements for the Professional Discussion:

- You will have at least seven days' notice of the date/time and location of the Professional Discussion assessment
- The independent assessor prepares for the Professional Discussion by reviewing the portfolio content in advance of the Professional Discussion.
- The Professional Discussion will last 90 minutes (+/- 10%) of which 30 minutes should be focussed on the content of the portfolio.
- The Professional Discussion will be conducted online by default, but face-to-face session can be organised by exception.
- The Professional Discussion will be conducted in a suitable location. This may be at the university or employer location as appropriate.
- The independent assessor must put you at ease and give you the opportunity to do your very best.
- The Professional Discussion is undertaken by the same independent assessor, who will make the grading decision.
- The Professional Discussion will be recorded.

The independent assessor will:

- Give you the best possible opportunity to get the best possible result from the Professional Discussion
- Ask open questions to guide you to illustrate the knowledge, skills and behaviours being tested through this method.

3.3 FAIR ACCESS AND REASONABLE ADJUSTMENTS

The EPA is designed as fair and impartial assessment. As such any reasonable adjustments for your fair treatment will be made. For example, if you have a Sheffield Hallam University learning contract, then provision can be made so that you have a fair access to the EPA. This will vary according to the specifics of the learning contract but may for example take the form of extra breaks during the Professional Discussion or provision for dyslexia in the Project Report.

4. EPA GATEWAY

4.1 PASSING GATEWAY

The EPA Gateway represents a milestone after which apprentices are deemed ready to proceed to the EPA.

To pass the End-Point Assessment Gateway, you must have:

1. Completed of all the modules in the MSc Digital and Technology Solution Specialist programme;
2. Have Passed Level 2 English and Maths (if not already achieved);
3. Have met minimum requirements for off the job learning and completed off the job learning log;
4. Successfully completed the Independent Study / Consultancy Project 60 credit module;
5. Confirmed that you have produced a Portfolio in relation to evidencing the core KSBs towards the end of the apprenticeship;
6. Confirmed that you have produced all the documents required by the standard and SHU;
7. Signed Gateway declaration form by all 3 parties.

Passing Gateway is designed to be flexible within the 4-month period after the end of the Independent Study / Consultancy Project module. In practice most apprentices pass Gateway between September – December.

5. GRADING

The independent assessors will mark both the Project Report and Professional Discussion submissions within 3 months of passing the Gateway.

The EPA must be completed over a maximum total EPA time of 3 months after the you have met the gateway requirements.

To pass the EPA, you must pass both methods (Project Report and Professional Discussion).

5.1 GRADING OF EACH EPA METHODS

Each of the two EPA methods is graded. The independent assessor must individually grade each – fail, pass, merit or distinction. This is based on you demonstrating the themes aligned to the KSBs that have been assigned to that EPA method as set out in Appendix A. Appendix B sets out the grading descriptors for fail, pass, merit and distinction for each of the two EPA methods.

The table below shows how an overall grade for the Apprenticeship is achieved.

Project Report	Professional Discussion	Overall Grade
Pass	Pass	Pass
Pass	Merit	Pass
Pass	Distinction	Pass
Merit	Pass	Merit
Merit	Merit	Merit
Merit	Distinction	Merit
Distinction	Pass	Merit
Distinction	Merit	Distinction
Distinction	Distinction	Distinction

5.2 MASTERS DEGREE GRADING

The MSc will be classified in accordance with the University integrated degree regulations. If you fail the EPA a degree cannot be awarded and vice versa.

6. RE-SITS AND RE-TAKES

You must pass both the Project Report and Professional Discussion components of the EPA. Each KSB needs to be evidenced. If the assessors do not find suitable evidence against all the KSBs then you will fail the EPA.

The assessors will provide feedback on the KSB(s) where evidence is insufficient, and a re-sit can be made. This must be done within six months of having been informed of the failure, otherwise the entire EPA must be retaken.

Unlike University modules, re-sits are not capped. As such a successful re-sit may lead to a Distinction or Merit as well as a Pass. Your MSc classification is unaffected by any EPA re-sit requirements.

Once an EPA method has been passed, it does not have to be re-taken. For example, if you pass the Project Report but fails the Professional Discussion, you can re-sit the Professional Discussion without having to re-sit the Project Report.

No component of the EPA can be re-taken just to increase your grade (re- takes only enable movement from a fail to pass or beyond).

7. AWARDING THE EPA

The EPA result once received by the assessors will be communicated to you. Formal ratification of the MSc and Apprenticeship will take place at the Apprenticeship Progression Board. These take place in October and February.

8. ADDITIONAL INFORMATION

The full apprenticeship standard can be reviewed at:

https://www.instituteforapprenticeships.org/media/5623/st0482_digital-technology-solutions-specialist_l7_ap-for-publication_2021_10_21.pdf

if you require clarity on any aspect of this document, contact the Course Leader Martin Cooper (m.j.cooper@shu.ac.uk) or your Work Based Learning Coach.

APPENDIX A – KNOWLEDGE, SKILLS AND BEHAVIOURS

Core Skills, Core Knowledge and Core Behaviours to be assessed	Methods of Assessment	
Business and change management		
B1 (Skill) Identify, document, review and design complex IT enabled business processes that define a set of activities that will accomplish specific organisational goals and provides a systematic approach to improving those processes;	**PR**	
B2 (Skill) Design and develop technology roadmaps, implementation strategies and transformation plans focused on digital technologies to achieve improved productivity, functionality and end user experience in an area of technology specialism;		**PD**
B3 (Skill) Deliver workplace transformations through planning and implementing technology based business change programmes including setting objectives, priorities and responsibilities with others in an area of technology specialism;		**PD**
B4 (Knowledge) The strategic importance of technology enabled business processes, and how they are designed and managed to determine a firm's ability to compete effectively;		**PD**
B5 (Knowledge) The principles of business transformation and how organisations integrate different management functions in the context of technological change;		**PD**
B6 (Knowledge) Own employer's business objectives and strategy, its position in the market and how own employer adds value to its clients through the services and/or products they provide;		**PD**
B7 (Knowledge) How to justify the value of technology investments and apply benefits management and realisation;		**PD**
Professional competencies		
P1 (Skill) Negotiate and agree digital and technology specialism delivery budgets with those with decision-making responsibility;		**PD**
P2 (Skill) Develop and deliver management level presentations which resonate with senior stakeholders, both business and technical;		**PD**

P3 (Skill) Professionally present digital and technology solution specialism plans and solutions in a well-structured business report;	**PR**	
P4 (Skill) Demonstrate self-direction and originality in solving problems, and act autonomously in planning and implementing digital and technology solutions specialist tasks at a professional level;	**PR**	
P5 (Skill) Be competent at negotiating and closing techniques in a range of interactions and engagements, both with senior internal and external stakeholders;	**PR**	
P6 (Knowledge) The role of learning and talent management in successful business operations.		**PD**
Leadership		
L1 (Skill) Evaluate the significance of human factors to leadership in the effective implementation and management of technology enabled business processes;		**PD**
L2 (Skill) Develop own leadership style and professional values that contributes to building high performing teams;		**PD**
L3 (Behaviour) Inspire and motivate others to deliver excellent technical solutions and outcomes		**PD**
L4 (Behaviour) Establish high levels of performance in digital and technology solutions activities		**PD**
L5 (Behaviour) Be results and outcomes driven to achieve high key performance outcomes for digital and technology solutions objectives		**PD**
L6 (Behaviour) Promote a high level of cooperation between own work group and other groups to establish a technology change led culture		**PD**
L7 (Behaviour) Develop and support others in developing an appropriate balance of leadership and technical skills		**PD**
L8 (Behaviour) Create strong positive relationships with team members to produce high performing technical teams		**PD**
L9 (Knowledge) The role of leadership in contemporary technology based organisations;		**PD**
L10 (Knowledge) The personal leadership qualities that are required to establish and maintain an organisations technical reputation.		**PD**

L11 (Knowledge) The role of leaders as change agents and identify contributors to successful implementation;		**PD**
Technology management		
T1 (Skill) Apply broader technical knowledge combined with an understanding of the business context, and how it is changing, to deliver to the company's business strategy;		**PD**
T2 (Skill) Demonstrate effective technology leadership and change management skills for managing technology driven change and continuous improvement;		**PD**
T3 (Skill) Create and implement innovative technological strategies to support the development of new products, processes and services that align with the company's business strategy, and develop and communicate compelling business proposals to support these.		**PD**
T4 (Knowledge) How to monitor technology related market trends and research and collect competitive intelligence;		**PD**
T5 (Knowledge) Technology road-mapping concepts and methods and how to apply them;		**PD**
Software Engineering Specialist Skills to be assessed	**Methods of Assessment**	
S1 - Architect, build and support leading edge concurrent software platforms that are performant to industry standards and deliver responsive solutions with good test coverage;	**PR**	
S2 - Drive the technology decision-making and development process for projects of varying scales, considering current technologies including DevOps and Cloud Computing, and evaluate different technology design and implementation options making reasoned proposals and recommendations;	**PR**	
S3 - Develop and deliver, distributed or semi-complex software solutions that are scalable and which deliver innovative user experiences and journeys that encompass cross-functional teams, platforms and technologies;	**PR**	
S4 - Update current software products, improving the efficiency and functionality, and build new features to product specifications;	**PR**	
S5 - Accomplish planned software development tasks that deliver the expected features, within specified time constraints, security and quality requirements;	**PR**	

S6 - Be accountable for the quality of deliverables from one or more software development teams (source code quality, automated testing, design quality, documentation etc.) and following company standard processes (code reviews, unit testing, source code management etc.).	**PR**	
S7 - The rationale for software platform and solution development, including the organisational context;		**PD**
S8 – The various inputs, statements of requirements, security considerations and constraints that guide solution architecture and the development of logical and physical systems' designs;	**PR**	
S9- The methodologies designed to help create approaches for organizing the software engineering process, the activities that need to be undertaken at different stages in the life-cycle and techniques for managing risks in delivering software solutions;	**PR**	
S10 - The approaches used to modularise the internal structure of an application and describe the structure and behaviour of applications used in a business, with a focus on how they interact with each other and with business users;	**PR**	
S11 - How to design, develop and deploy software solutions that are secure and effective in delivering the requirements of stakeholders and the factors that affect the design of a successful code;	**PR**	
S12 - The range of metrics which might be used to evaluate a delivered software product.	**PR**	
Data Analytics Specialist Skills to be assessed	**Methods of Assessment**	
D1 - Identify and select the business data that needs to be collected and transitioned from a range of data systems; acquire, manage and process complex data sets, including large-scale and real- time data;	**PR**	
D2 - Undertake analytical investigations of data to understand the nature, utility and quality of data, and developing data quality rule sets and guidelines for database designers;	**PR**	
D3 - Formulate analysis questions and hypotheses which are answerable given the data available and come to statistically sound conclusions;	**PR**	
D4 - Conduct high-quality complex investigations, employing a range of analytical software, statistical modelling & machine learning techniques to make data driven decisions solve live commercial problems;	**PR**	

D5 - Document and describe the data architecture and structures using appropriate data modelling tools, and select appropriate methods to present data and results that support human understanding of complex data sets;	**PR**	
D6 - Scope and deliver data analysis projects, in response to business priorities, create compelling business opportunities reports on outcomes suitable for a variety of stakeholders including senior clients and management.	**PR**	
D7 - How key algorithms and models are applied in developing analytical solutions and how analytical solutions can deliver benefits to organisations;	**PR**	
D8 - The information governance requirements that exist in the UK, and the relevant organisational and legislative data protection and data security standards that exist. The legal, social and ethical concerns involved in data management and analysis;		**PD**
D9 - The principles of data driven analysis and how to apply these. Including the approach, the selected data, the fitted models and evaluations used to solve data problems;	**PR**	
D10 - The properties of different data storage solutions, and the transmission, processing and analytics of data from an enterprise system perspective. Including the platform choices available for designing and implementing solutions for data storage, processing and analytics in different data scenarios;	**PR**	
D11 - How relevant data hierarchies or taxonomies are identified and properly documented;	**PR**	
D12 - The concepts, tools and techniques for data visualisation, including how this provides a qualitative understanding of the information on which decisions can be based.	**PR**	

APPENDIX B – ASSESSMENT CRITERIA

Professional Discussion informed by Portfolio				
	Fail The apprentice will be deemed to have Failed the Professional discussion if they have not met the pass criteria **The Apprentice:**	**Pass** The apprentice will be deemed to have Passed the Professional Discussion if they provide evidence to meet all the Knowledge, Skills and Behaviour requirements set out for the Professional Discussion informed by the Portfolio in Annex A and all of the criteria below: **The Apprentice:**	**Merit** The apprentice will be deemed to have achieved a Merit in the Professional Discussion if they provide evidence to meet all the pass criteria and also all of the additional criteria below: **The Apprentice:**	**Distinction** The apprentice will be deemed to have achieved a Distinction in the Professional Discussion if they provide evidence to meet all of the merit criteria and also all of the additional criteria below: **The Apprentice**
Core Themes aligned to KSBs (See Annex 1 for how the themes link to standard)				
Business and change management	• Has not met the pass criteria	• Develops well-reasoned technology roadmaps and clear plans for their implementation Demonstrates an awareness of how to deliver technology based business change programmes	• Plans and implements technology based business change programmes	• Manages time effectively and with constant attention to detail, contributes positively to the effective working of a team. • Displays a comprehensive and leadership understanding of IT enabled business processes and technology road-mapping • Compares different methods of achieving technology based business change programmes that positively contributes to the effective delivery of workplace transformations

Professional competencies	• Has not met the pass criteria	• Is able to demonstrate negotiation skills and present budget requests. • Selects suitable presentation media and delivers presentation. • Can apply problem solving as part of developing solutions • Can select and apply problem solving techniques as an integral part of the solution development process.	• Shows confidence and control in negotiations and is able to communicate effectively to agree budgets. • Prepares for and confidently delivers presentations adjusting to different audience needs and responding to stakeholder requests.	• Is able to confidently and authoritatively negotiate and gain agreement for well-defined and justified budget requests across a range of different contexts. • Is highly aware of the audience environment and can determine appropriate presentation style and action and articulate recommendations to the audience, maintaining a balanced outline and regulating the pace of the presentation to fit time limits and to deal with questions. • Discusses and provides evidence of problem solving techniques and approaches and how to apply them in a range of conditions.
Leadership	• Has not met the pass criteria	• Can identify different leadership styles and motivational techniques to drive high quality technical solutions and outcomes • Correctly identifies professional values that contribute to building high performing teams. • Understands coaching techniques to develop leadership and technical skills in others. • Understands ways to develop good working relationships within own team and between teams.	• Provides clear evaluation of the human factors that contribute to leadership and management of technology in business. • Is able to describe own leadership style, strengths and weaknesses.	• Is highly proactive in their approach to leadership and management, and demonstrates a comprehensive understanding and application of the human factors that contribute to effective leadership and management. • Contributes positively to effective team working, making robust and reliable judgements and explains the reasoning behind judgements made. • Is highly proactive in developing leadership and technical skills in others. • Is highly proactive to ensure excellent working relationships

				between own and other groups.
Technology Management	• Has not met the pass criteria	• Shows evidence of understanding of the business context. • Shows awareness of the factors that enable technology driven change and continuous improvement • Understands that aligning new products, processes and services contributes to the • company's business strategy	• Understands and can explain the dynamic nature of the business environment and the internal and external factors that contribute to change. • Can describe how effective technology and change management can provide measurable improvements in business performance. • Can develop and communicate business proposals for the development of new products, processes and services that align with the company's business strategy.	• Displays a depth of understanding in technical knowledge and of how managing business change to respond to changing markets can deliver to the company's business strategy. • Shows evidence of proactive technology leadership for managing technology driven change and continuous improvement • Shows evidence of developing compelling business proposals for new products, processes and services that have a justifiable and of measurable contribution with the company's business strategy.
Software Engineering Specialist only	• Has not met the pass criteria	• Demonstrates competence in architecting software platforms.		
Data Analytics Specialist only	• Has not met the pass criteria	• Understands and can explain the information governance and data protection requirements that exist in the UK together with the legal, social and ethical concerns involved.		

Project Report				
	Fail The apprentice will be deemed to have Failed the Professional Report if they have not met the pass criteria **The Apprentice:**	**Pass** The apprentice will be deemed to have Passed the Professional Report if they provide evidence to meet all the Knowledge, Skills and Behaviour requirements set out for the Professional Report in Annex A and all the criteria below: **The Apprentice:**	**Merit** The apprentice will be deemed to have achieved a Merit in the Professional Report if they have met all of the pass criteria and all of the additional criteria below: **The Apprentice:**	**Distinction** The apprentice will be deemed to have achieved a Distinction in the Professional Report if they meet all of the merit criteria and the additional criteria below: **The Apprentice**
Core Professional competencies				
	• Has not met the pass criteria	• Demonstrates competence in designing complex IT enabled business processes and in making some recommendations for improvement • Demonstrates practical report writing skills to produce solution reports	• Is able to accomplish complex IT enabled business process design and in making detailed business recommendations aligned and justifiable improvements • Can select appropriate formats to produce digital and technology solution specialism plans and solutions in a well-structured business report	• Is proactive in improving complex IT enabled business processes • Is able to select, discuss and prepare a range of appropriate professionally presented digital and technology solution specialism plans and solutions in a well-structured business report, including clear outcomes, methods in a compelling way with a succinct management summary
	• Has not met the pass criteria	• Can plan and implement digital and technology solutions specialist tasks at a professional level	• Can implement structured problem solving approaches and plan and implement digital and technology solutions specialist tasks at a professional level	• Can demonstrate self-direction and originality in solving problems, using structured approaches and act autonomously in planning and implementing digital and technology solutions specialist tasks at a professional level

	• Has not met the pass criteria	• Can apply negotiating skills to agree outcomes	• Is competent at negotiating and closing techniques for semi complex problems and can deal with senior internal and external stakeholders	• Is competent at selecting and applying negotiating and closing techniques in a range of interactions and engagements, both with senior internal and external stakeholders
Specialism aligned to KSBs				
Software Engineering Specialist	• Has not met the pass criteria	• Demonstrates competence in architecting software platforms. • Is aware of contemporary software development approaches and methodologies including DevOps and Cloud Computing. • Can develop and deliver, basic software solutions that deliver most of the specified functionality. • Can update existing software solutions • Can interpret a plan and deliver software solutions on time. • Can test own software and others software to ensure that it is defect free.	• Understands and can explain the features and benefits of a range of alternative software development methodologies and technologies. • Is able to accomplish semi-complex software solutions that deliver all of the required functionality. • Can review existing software and improve the efficiency and functionality. • Can incorporate basic security considerations into software projects, delivering solutions on time and to meet specified level of quality. • Understands and can explain the range of factors that contribute to software quality including source code quality, how testing assures quality, and the importance of quality in design, documentation etc.	• Compares different software methodologies and can select technologies for different contexts of software development. • Can develop and deliver complex software solutions that are scalable and which deliver feature rich user experiences. • Is proactive in code review and refactoring. • Plans and implements security considerations across the software development process. Can plan and deliver complex software projects. • Displays a comprehensive understanding of software quality and can select and implement quality frameworks for software development.

Data Analytics Specialist	• Has not met the pass criteria	• Is able to demonstrate basic data acquisition techniques. • Shows evidence of being able to appreciate the quality aspects of data. • Can develop simple analytical hypotheses for investigation. • Can conduct analysis on data using statistical techniques to help solve business problems. • Can select suitable methods to present data and the outcomes of a data study. • Can develop a business report to summarise the outcomes of the data study.	• Shows confidence in identifying sources of data and in processing complex and large data sets. • Understands and can explain the factors that contribute to data quality and can develop data quality rules. • Prepares for a data analysis by formulating hypotheses. Confidently delivers semi-complex investigations using analytical programming techniques and statistical methods, including an understanding of the application of machine learning. • Can present different data architectures adjusting to different audience needs and using data visualisation techniques.	• Is able to confidently and authoritatively identify, select, extract and combine data from across a range of different data sources and contexts. • Is highly aware of the nature of data and the quality issues that can arise from incomplete or dirty data. Can select and apply data cleansing techniques to improve the quality of data. • Can formulate analysis questions and hypotheses and develop associate algorithms to answer complex problems with statistically sound conclusions; • Can conduct complex analyses of data, selecting and utilising a range of analytical software, statistical modelling & machine learning techniques to come to conclusions and make recommendations. • Can model and visualise complex data and select appropriate methods to present data and results that support human understanding of complex data sets.

APPENDIX C – PORTFOLIO STRUCTURE

The Portfolio is stored on a One Drive which you will be given access to. The structure of the OneDrive folders is set up as:

EPA part 1 – Project Report	
EPA – PR Project Report	PDF or Word Copy of your Project Report. **Template provided.**
EPA – PR Appendices (max 4)	Four appendices that may be referenced in the above.
EPA – PR Video	Short (no more than 5 minute) overview of the project.
EPA part 2 – Professional Discussion	
1. Index Page	To list out all the documents included in the portfolio with an indication on how to find individual documents. **Template provided.**
2. KSBs Contents and Mapping	Summary of the end evidence mapped against individual KSBs. **Template provided.**
3. Portfolio Introduction	A brief introduction/commentary by the Apprentice, and highlighting, where appropriate, anything you would do differently. A page long document introducing the results of your work for PD. That includes the reflection on how 26 KSBs were met during the apprenticeship programme. **Template provided.**
4. Work Based Project STAREs	STARE statements are the summary of Apprentice's TWO large pieces of work/Projects. The last section of a STARE statement contains critical evaluation of how each one of 26 PD KSBs has been met. The end evidence is not included in the STARE statements. It should be filed in individual and shared end evidence folders. The summary of the end evidence mapped against individual KSBs is presented in KSBs-contents-and-mappings.docx template. **Templates provided.**
5. End Evidence Folder	Subfolders *individual* and *shared* evidence for all KSBs. Employer Testimonies to support STAREs to be included in the *shared* folder. **Structure Provided.**
6. Teamworking Critical Reflection	It is critical reflection on your Teamworking Skill development during the apprenticeship. The statement is not KSB or project specific. It covers your overall teamwork development during the programme. **Template provided.**
7. Apprenticeship Performance Two Witness Testimonies	The document should include two witness testimonies: one from a line manager and the other from a colleague in the workplace. They should verify that the apprenticeship has taken place and give a brief overall view on the apprentice's progress, development and an impact at work during the apprenticeship. **Template provided.**
8. DTSS EPA Gateway Declaration Form	A signed statement from the employer, the Apprentice and university confirming this is the Apprentice's own work and that, in their view, the work demonstrates the required competence against the Standard. **Template provided.**