EPA Assessor Training

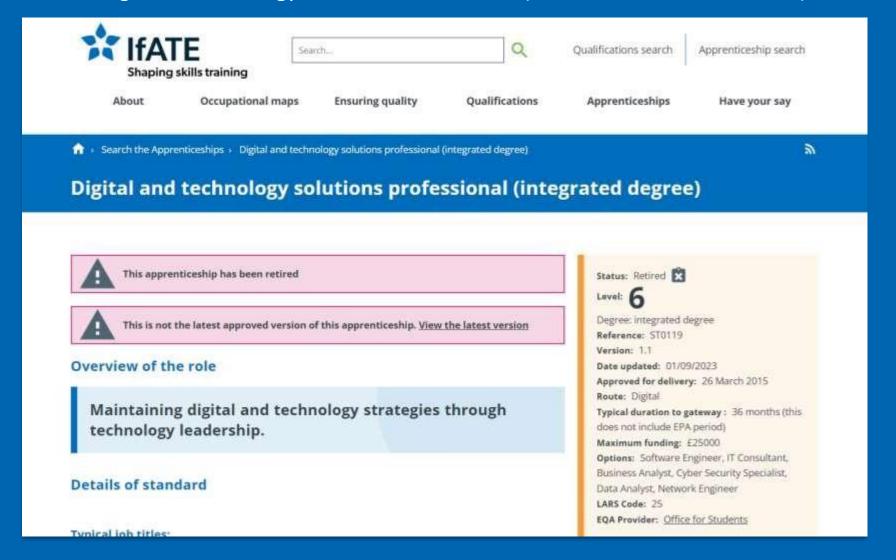
BSc Digital & Technology Solutions Degree Apprenticeship

Iintegrated Degree

Reference: ST0119

Version: 1.1

BSc Digital & Technology Solutions Professional (ST0119 - 2015 - version: 1.1)

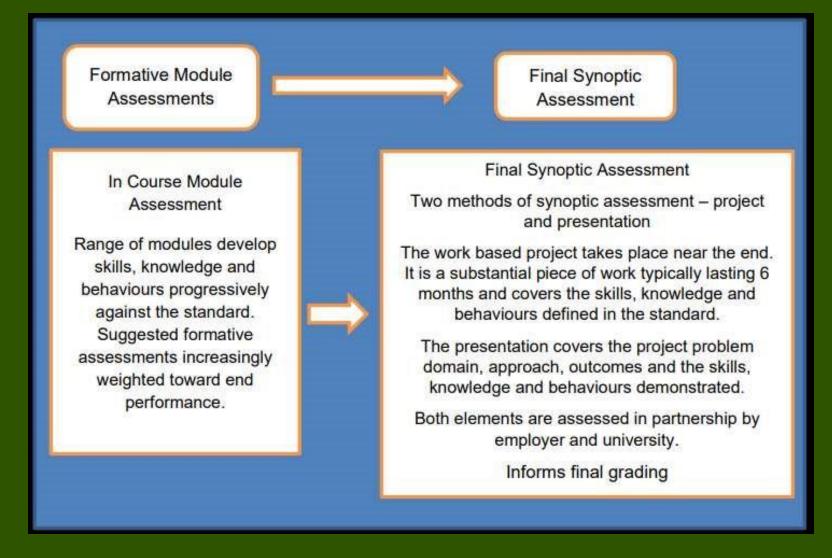


Knowledge, Skills & Behaviours

Knowledge, Skills & Behaviours (KSBs) Mapping

	Digital & Technology Solutions Degree Apprenticeship Software Engineer	Problen Solving Through Progromming	Introduction to Networks and Security	Introduction to Databases	Software Testing & Reliability Engineering	Data Structures, Algorithms & Maths	Systems Analysis & Design in the Workplace	Object Oriented Design & Development	Advanced Database Systems	Introduction to Al	Mobile Application Development SE	Work Based IT Project Management	Work Based Business Organisation	Machine Learning	DevOps	Data Science	Industrial Consulting Project	Synoptic Work Based Project
	BDATS Standard 1.1	COM411	COM412	COM417	COM422	COM421	COM423	COM528	COM519	COM526	COM527	COM532	COM530	COM624	COM619	COM618	COM617	COM625
				Leve	14					Level	i					Level 6		
Core S	Skills from the standard																	
Inform	ation Systems:						o.											
C1	Is able to critically analyse a business domain in order to identify the role of information systems, highlight issues and identify opportunities for improvement through evaluating information systems in relation to their intended purpose and effectiveness						*			*		*	*				*	*
Syster	ns Development																	
C2	Systems Development: analyses business and technical requirements to select and specify appropriate technology solutions. Designs, implements, tests, and debugs software to meet requirements using contemporary methods including agile development. Manages the development and assurance of software artefacts applying secure development practises to ensure system resilience. Configures and deploys solutions to end users.	*			*		*	*	*	*					*	*	*	*
Data																		
C3	Identifies organisational information requirements and can model data solutions using conceptual data modelling techniques. Is able to implement a database solution using an industry standard database management system (DBMS). Can perform database administration tasks and is cognisant of the key concepts of data quality and data security. Is able to manage data effectively and undertake data analysis.	*		*					*							*		
Cyber	Security																	
C4	can undertake a security risk assessment for a simple IT system and propose resolution advice. Can identify, analyse and evaluate security threats and hazards to planned and installed information systems or services (e.g. Cloud services).								*									
Busine	ess Organisation																	
C5	can apply organisational theory, change management, marketing, strategic practice, human resource management and IT service management to technology solutions development. Develops well-reasoned investment proposals and provides business insights.	7					*						*				*	*
IT Pro	ect Management																	**
C6	follows a systematic methodology for initiating, planning, executing, controlling, and closing technology solutions projects. Applies industry standard processes, methods, techniques and tools to execute projects. Is able to manage a project (typically less than six months, no inter-dependency with other projects and no strategic impact) including identifying and resolving deviations and the management of problems and escalation processes.						*					*					*	*
Comp	uter and network infrastructure																	
C7	can plan, design and manage computer networks with an overall focus on the services and capabilities that network infrastructure solutions enable in an organisational context. Identifies network security risks and their resolution.		*															
Core 1	echnical Knowledge from the standard:																	**
C8	How business exploits technology solutions for competitive advantage.						*			*		*	*					
C9	The value of technology investments and how to formulate a business case for a new technology solution, including estimation of both costs and benefits						*					*	*					*

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Overall Assessment Strategy

The assessment strategy for the **Degree Apprenticeship** includes a balanced mix of essays, reports, practical exercises, coursework, and tests. These are mapped to each module of the **BSc Digital & Technology Solutions Degree Apprenticeship** to assess the development of Knowledge, Skills, and Behaviours (KSBs). The End Point Assessment (EPA) consists of a Synoptic Project and Presentation.

Portfolio Mapping

BSc (Hons) Digital & Technology Solutions

Apprenticeship Portfolio Template ST0119 v:1.1



+		
	Apprentice:	
1	Student No:	
1	ULN number:	
	Pathway:	Software Engineer
1	Company:	
	Completion Date:	

The structure of the apprentice development of the portfolio mapping should mirror to the DATS apprenticeship standard, to ensure that there is good coverage of KSBs

Holistic use of evidence is encouraged, so that a piece of evidence is used across multiple Learning Outcomes.

Cut & paste the evidence blocks as required. Add a description to each. Highlight the Learning Outcome (LO) codes using the pathway learning outcomes description document to support you.

Eviden	ce												
						u apply k edback?	nowledge	& skills j	from the s	tandard? L	Did you ap	ply theory	&
CS1	CS2	CS3	CS4	CS5	CS6	CS7		39	39 5		50 5		59
CTK1	CTK2	CTK3	CTK4	CTK5	CTK6	CTK7	CTK8	CTK9	CTK10				
CBS1	CBS2	CBS3	CBS4	CBS5	CBS6	CBS7	CBS8	CBS9	CBS10	CBS11	CBS12	CBS13	CBS14
SES1	SES2	SES3	SES4	SES5	SES6	SETK1	SETK2	SETK3	SETK4	SETK5	SETK6		82

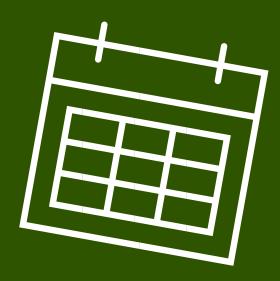
Eviden	ce												
						u apply k edback?		& skills f	from the s	tandard? l	Did you ap	ply theory	&
CS1	CS2	CS3	CS4	CS5	CS6	CS7	Š.	100	\$ E		8		8
CTK1	CTK2	CTK3	CTK4	CTK5	CTK6	CTK7	CTK8	CTK9	CTK10		V8 9		Vii
CBS1	CBS2	CBS3	CBS4	CBS5	CBS6	CBS7	CBS8	CBS9	CBS10	CBS11	CBS12	CBS13	CBS14
SES1	SES2	SES3	SES4	SES5	SES6	SETK1	SETK2	SETK3	SETK4	SETK5	SETK6	7	20

	SOFTWARE ENGINEER SKILLS MATRIX			COR	E SK	(ILLS					COR	E TEC	HNIC	AL KN	OWL	DGE							COF
	University modules	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CTK1	CTK2	СТКЗ	CTK4	CTK5	СТК6	CTK7	CTK8	CTK9	CTK10	CBS1	CBS2	CBS3	CBS4	CBS5
Æ	COM417 - Introduction to Databases																						
YEAR 1	COM422 - Software Testing and Reliability Engineering																						
	COM421 - Data Structures, Algorithms and Mathematcis																						
	COM423 - Systems Analysis and Design Work-based Project																						
	COM528 - Object-oriented Design and Development																						
	COM519 - Advanced Database Systems																						
±	COM526 - Introduction to Artificial Intelligence		0				0.			2); 3);				0)									
YEAR	COM527 - Mobile Application Development									2	4 .			2				2				8	2 22
2	COM530 - Business Organisation Management Work-based																						
	Project									æ				(6)	-							4	
	COM532 - IT Project Management Work-based Project																						
	COM624 - Machine Learning																						
¥	COM619 - DevOps																						
YEAR	COM618 - Data Science																						
ω	COM617 - Industrial Consulting Project													10				**					
	COM625 - Synoptic Work-based IT Project/Presentation						4																
	Other work-based tasks included in portfolio																						
	300																						
																		1.					
																							8
			0				0.			8)				8)								3	

Synoptic Project



The final **Synoptic Project** is a substantial piece of work, typically taking around **6 months** to undertake alongside the apprentices' normal duties to their employer and will include **doing practical work and report writing**.



The Project Aim

The project should add value to your organisation, and it needs to hit the pathway learning outcomes (KSBs) that are in the apprenticeship standard.



Project Sign Off

The project topic must be discussed, agreed upon, and approved by the University, the Apprentice, and the company/manager before the project begins using the project outline form.



<u>Digital and technology solutions professional (integrated degree) / Institute for Apprenticeships and Technical Education</u>

AE1 - Report 1 - 10% (1500 words)

The initial phase of the project focuses on defining its scope and purpose, including any relevant business, ethical, legal, and professional considerations. This phase also involves reviewing existing literature and developing a project plan. Feasibility and requirements are assessed during this stage as well.



AE2 - Report 1 - 70%) (10,000 words)

The final project report should present a narrative of the project from inception to completion, aligned with the relevant Knowledge, Skills, and Behaviours (KSBs). It should outline the approaches taken, the rationale for their selection, and assess the project's outputs in terms of their suitability for purpose. The report should also include conclusions, a critical review of the overall process, and recommendations for future development.



Final Report Structure

- 1. Title Page
- 2. Acknowledgements
- 3. Summary
- 4. Contents
- 5. List of Figures
- 6. Project Specification/Requirements
- 7. Methodology/Evaluation
 - Professional, Legal and Ethical issues
 - Project Management
- 8. Design, implementation
- 9. Testing & Results
- 10.Conclusions
- 11. Recommendations for further Work and/or discussion
- 12.References List
- 13.Appendices



AE3 - Demo/Presentation - 20% (25-30mins)

To support your Project Report, you will need to give a presentation/demonstration of your project.



Gateway

Upon completion of the on-programme off-the-job training, a **Gateway** meeting will be arranged to ensure that the apprentice has completed and passed all modules and is ready to progress to the End Point Assessment (EPA).

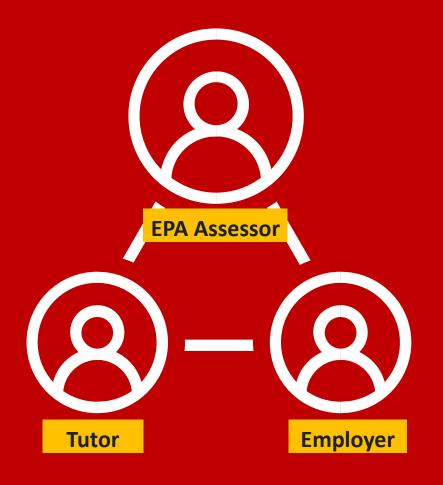
This meeting will also verify that all required documents, including the off-the-job training tracker, portfolio mapping and employer reference, have been completed.



End Point Assessment



EPA Presentation - 1 hour



"The presentation is a **structured** discussion between the apprentice and their university lecturer/s and employer, focusing on the outcomes of the synoptic project. It covers both what the apprentice has done, the standard of their work, and how they have done it."

The Presentation (P.7 2.2.3)

EPA Assessor

The EPA assessor will already have access to the Apprentice's Synoptic Project Report. They will need to formulate questions about the project, either using the provided question bank or by creating their own.

The Assessor will ask between 4 and 6 questions. They can also ask follow-up questions, provided



Within the anotated time hand

Employer Reference

The assessment of the Synoptic Project should include the **employer's evaluation against the common criteria.** This will be documented in the **Employer's Reference**, completed and **signed off before the EPA Presentation**.





Support Tutor Assessment

Support tutor will also evaluate and assess the Apprentice Synoptic Report and Presentation and will have available appropriate documentation to discuss and help finalise final grade at the EPA assessment meeting following on from the EPA Presentation.

This will fill fulfil the university's regulations on having two graders on a 40-Credit module assessment

The EPA Presentation serves to demonstrate how the apprentice has approached and achieved the project. It aims to explore the apprentices' process including problem solving and overall work, and must:

- . Review the project's aims and results.
- . Demonstrate the standard of work.
- Explain the approach and address issues.
- Clarify any questions from university/employer.
- . Confirm interpersonal and behavioural skills.
- Be assessed as part of the overall project assessment and inform the degree award.

Project Presentation Format

Can be conducted face-to-face or online (Photo ID required)



EPA Presentation - 1 hour



Assessment & Grading

Assessment and Grading

The Honours degree award and classification is based on a weighted average mark of the assessed work the apprentice has completed. The Synoptic Project (40 credits) contributes greatly to the final year marks. Apprentices will be graded using Honours degree classifications for English universities. The national degree award outcomes are shown below with apprenticeship grading equivalence. These typically are as follows:

Degree Award Class	Grading Equivalence	Marks Level
First-class Honours (1st)	Distinction	70+
Second-class Honours, upper division (2:1)	Merit	60-69
Second-class Honours, lower division (2:2)	Pass	50-59
Third-class Honours (3rd)	Pass	40-49



Grade Criteria & Calculation



	1st (Distin		2:1 (Merit)			2:2 (Pass)		3rd (Pass)	Fail						
100	90-99	80-89	70-79		60-69			50-59		40-49			0-39	0-39		
10	9	8	7		6			5		4		3	2		0	
100	92	83	74	68	65	62	58	55	52	48	45	42	35	20	15	ı v
Extraordinary, flawless, publishable (or industry standard)	Superb, outstanding, original	Articulated, highly impressive, excellent,	Strong, proficient, very good	Competen	t, good, effectiv	e, capable	Reasona	ble, fair, appro	priate	Basic, sa	atisfactory, ac	ceptable	Inadequate, incomplete, limited	Poor, unsa we		No attempt, No submission, Absent

Numeric Grade Marks

1st (Distinction)									
100	90-99	80-89	70-79						
10	9	8	7						
100	92	83	74						
Extraordinary, flawless,	Superb, outstanding	Excellent	Strong, proficient, very good						

Extraordinary 100%: This grade is for work that is truly exceptional in every way. The project demonstrates groundbreaking innovation and has a significant impact on the organisation. The report is meticulously detailed, and the presentation is highly engaging and professional.

1st (Distinction)						
100	90-99	80-89	70-79			
10	9	8	7			
100	92	83	74			
Extraordinary, flawless,	Superb, outstanding	Excellent	Strong, proficient, very good			

Outstanding 92%: This grade is for work that is significantly above average. The project shows a high level of creativity and effectiveness. The report is thorough and well-organised, and the presentation is clear and confident.

1st (Distinction)						
100	90-99	80-89	70-79			
10	9	8	7			
100	92	83	74			
Extraordinary, flawless,	Superb, outstanding	Excellent	Strong, proficient, very good			

Excellent 83%: This grade indicates very high-quality work. The project is well-executed and meets all the objectives effectively. The report is comprehensive and well-written, and the presentation is polished and informative.

1st (Distinction)						
100	90-99	80-89	70-79			
10	9	8	7			
100	92	83	74			
Extraordinary, flawless,	Superb, outstanding	Excellent	Strong, proficient, very good			

Excellent 83%: This grade indicates very high-quality work. The project is well-executed and meets all the objectives effectively. The report is comprehensive and well-written, and the presentation is polished and informative.

1st (Distinction)						
100	90-99	80-89	70-79			
10	9	8	7			
100	92	83	74			
Extraordinary, flawless,	Superb, outstanding	Excellent	Strong, proficient, very good			

Strong/Very Good 74%: This grade is for work that is above average. The project is solid and achieves its goals. The report is detailed and clear, and the presentation is well-prepared and delivered.

2:1 (Merit)		2:2 (Pass)			3rd (Pass)				
	60-69		50-59			40-49			
	6		5			4			
68	65	62	58 55 52		48	45	42		
Competent, good, effective, capable		Reasonable, fair, appropriate			Basic, satisfactory, acceptable				

Competent, good, effective, capable 60-69%: This grade is for work that meets the basic requirements. The project is adequately executed and achieves its main objectives. The report is clear and covers the necessary points, and the presentation is satisfactory.

2:1 (Merit)			2:2 (Pass)			3rd (Pass)					
	60-69		50-59			50-59			40-49		
	6			5			4				
68	65	62	58	55	52	48	45	42			
Competent, good, effective, capable		Reasonable, fair, appropriate			Basic, satisfactory, acceptable						

Reasonable, fair, appropriate 50-59%: This grade is for work that is acceptable but has some shortcomings. The project meets most objectives but lacks depth or thoroughness. The report is adequate but may be missing some details, and the presentation is clear but not particularly engaging..

2:1 (Merit)		2:2 (Pass)			3rd (Pass)			
	60-69		50-59			40-49		
	6			5		4		
68	65	62	58 55		52	48	45	42
Competent, good, effective, capable		Reasonable, fair, appropriate			Basic, satisfactory, acceptable			

Basic, satisfactory, acceptable 40-49%: This grade is for work that meets the minimum requirements. The project is completed but lacks depth and impact. The report covers the basics but is not detailed, and the presentation is clear but lacks enthusiasm.

	Fail			
0-39				
3	2	0		
35	20	15		
Inadequate, incomplete, limited	Poor, unsatisfactory, weak	No attempt, No submission, Absent		

Inadequate, incomplete, limited 30-39: This grade is for work that does not meet the required standards. The project fails to achieve its main objectives. The report is incomplete or poorly organised, and the presentation is unclear or unprofessional.

	Fail	
	0-39	
3	2	0
35	20	15
Inadequate, incomplete, limited	Poor, unsatisfactory, weak	No attempt, No submission, Absent

Poor, unsatisfactory, weak 20-39%: This grade is for work that is significantly below the required standards. The project is poorly executed and has little to no impact. The report is very incomplete or poorly written, and the presentation is unclear and unengaging.

	Fail	
3	2	0
35	20	15
Inadequate, incomplete, limited	Poor, unsatisfactory, weak	No attempt, No submission, Absent

Inadequate, incomplete, limited 30-39: This grade is for work that does not meet the required standards. The project fails to achieve its main objectives. The report is incomplete or poorly organised, and the presentation is unclear or unprofessional.

В	C ₁	D	E	F
	BSc Digital & Technology Solution	s Degree Apprenticeship Synoptic Project EPA Assessmen	nt (Standard 1.1)	
	Apprentice Name			DATE
88			Overall	Grade
Solen KSB Code	Area of competence	Assessment criteria		
Co	re Skills from the standard			Add Grade using the Dropdown
CS1	Information Systems: Can critically analyse a business domain (Core functions & processes of a company) to identify the role of information systems, highlight issues and identify opportunities for improvement through evaluating information systems in relation to their intended purpose and effectiveness	Understanding of the business domain and how information systems align with its goals, demonstrated by the clarity and depth of their analysis. Key aspects could include identifying system roles and purposes, uncovering specific issues, and using evidence-based insights to evaluate system effectiveness, realistic, strategically aligned improvements that show innovative thinking and practicality within the business context.		
CS2	Systems Development: analyses business and technical requirements to select and specify appropriate technology solutions. Designs, implements, tests, and debugs software to meet requirements using contemporary methods including agile development. Manages the development and assurance of software artefacts applying secure development practises to ensure system resilience. Configures and deploys solutions to end users.	Ability to analyse requirements and select suitable technology solutions, effectively design, implement, test, and debug software using methods like agile, and ensure secure, resilient artefacts through robust development practices. Skill in configuring and deploying solutions for end users efficiently and reliably is also essential.		
	Data: Identifies organisational information requirements and can model data			

Thank You