EPA Assessor Training

BSc Digital & Technology Solutions Degree Apprenticeship

Integrated Degree
Reference: ST0119
Version: 1.1

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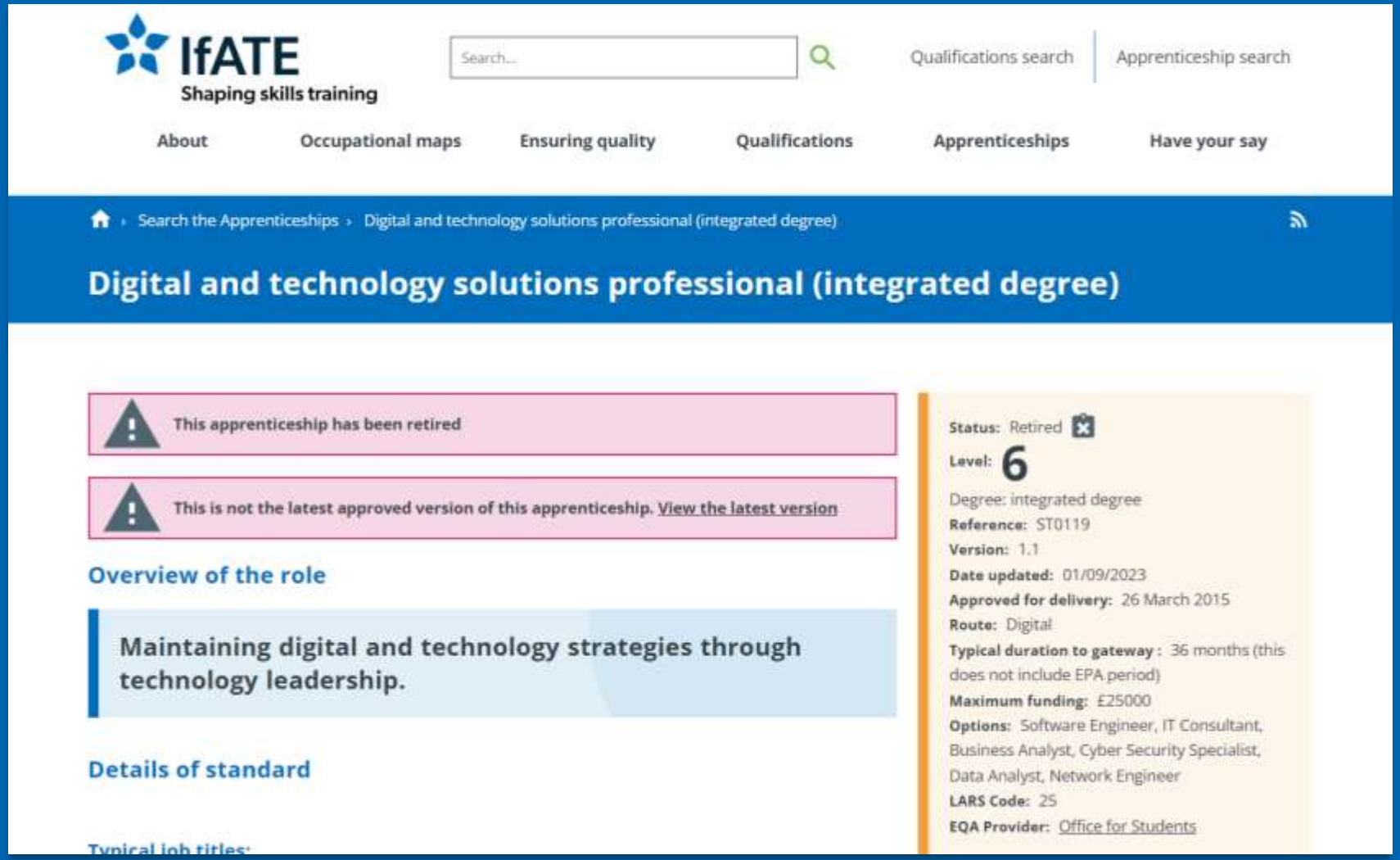
Computing | Department of Science and Engineering Department | Southampton Solent University

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



INSTITUTE FOR APPRENTICESHIPS, 2015. *Digital and technology solutions professional (integrated degree)* [viewed 18 October 2024]. Available from: https://www.instituteforapprenticeships.org/apprenticeship-standards/digital-and-technology-solutions-professional-integrated-degree-v1-1

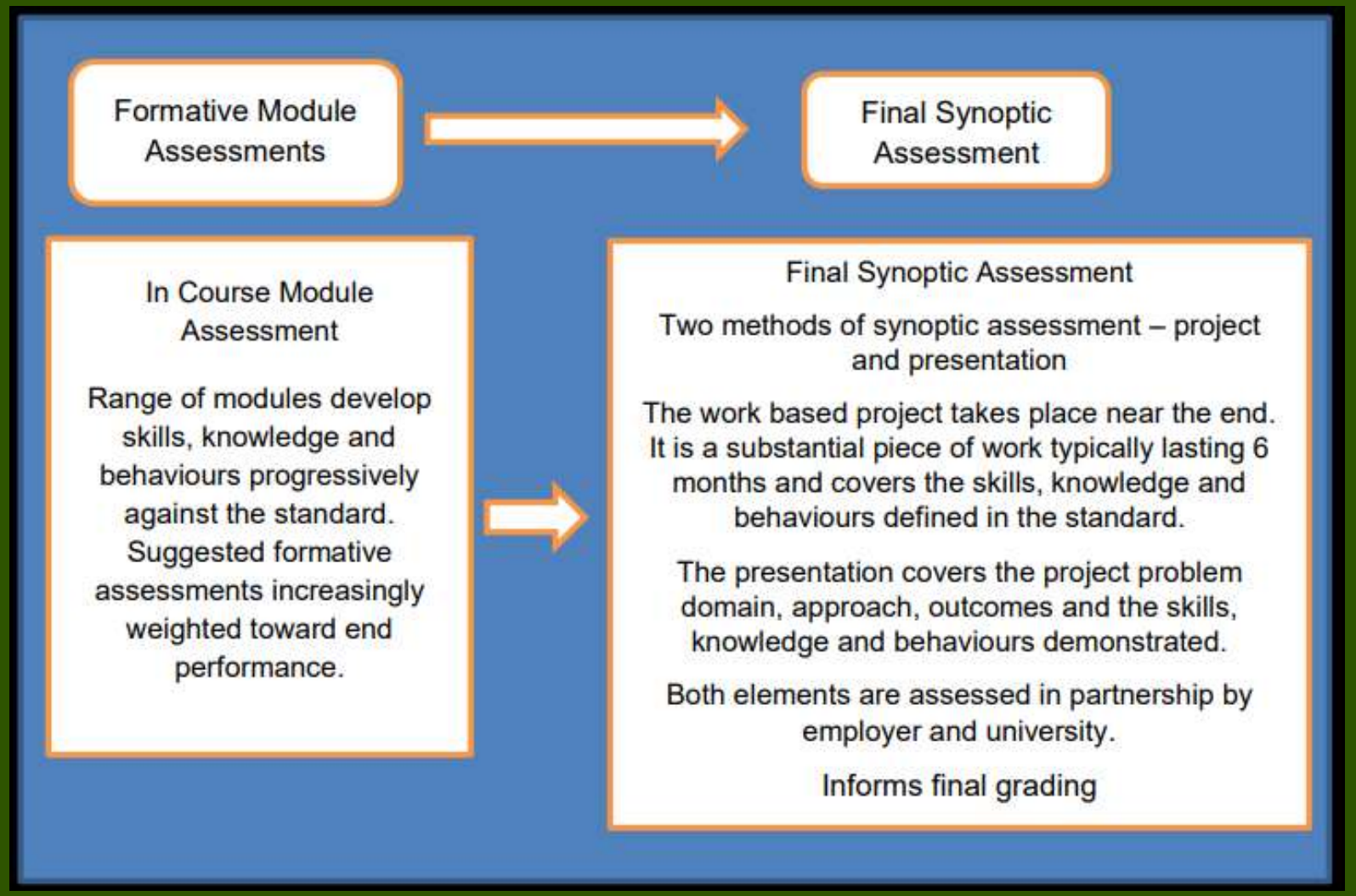
KSB

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 AI	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
	Level 4						Level 5						Level 6				
Core Skills from the standard																	
Information Systems:																	
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						*			*		*	*				*	*
Systems 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).								*									
Business 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.						*						*				*	*
IT Project 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.						*					*					*	*
Computer 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 Technical 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						*					*	*					*

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



INSTITUTE FOR APPRENTICESHIPS, 2015b. *DIGITAL INDUSTRIES -ASSESSMENT PLAN DIGITAL & TECHNOLOGY SOLUTIONS PROFESSIONAL BSC (Hons) Digital & Technology Solutions*. instituteforapprenticeships.org. Institute for Apprenticeships [viewed 18 October 2024]. Available from: https://www.instituteforapprenticeships.org/media/1073/digital_and_technology_solutions_professional.pdf

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.

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Portfolio Mapping

BSc (Hons) Digital & Technology Solutions

Apprenticeship Portfolio Template

ST0119 v:1.1

Apprentice:	
Student No:	
ULN number:	
Pathway:	Software Engineer
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.

Evidence													
What does the evidence demonstrate? How did you apply knowledge & skills from the standard? Did you apply theory & practice? What was the impact? Did you receive feedback?													
CS1	CS2	CS3	CS4	CS5	CS6	CS7							
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		

Evidence													
What does the evidence demonstrate? How did you apply knowledge & skills from the standard? Did you apply theory & practice? What was the impact? Did you receive feedback?													
CS1	CS2	CS3	CS4	CS5	CS6	CS7							
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		

	SOFTWARE ENGINEER SKILLS MATRIX	CORE SKILLS							CORE TECHNICAL KNOWLEDGE										COR					
	University modules	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CTK1	CTK2	CTK3	CTK4	CTK5	CTK6	CTK7	CTK8	CTK9	CTK10	CBS1	CBS2	CBS3	CBS4	CBS5	C
YEAR 1	COM417 - Introduction to Databases																							
	COM422 - Software Testing and Reliability Engineering																							
	COM421 - Data Structures, Algorithms and Mathematcis																							
	COM423 - Systems Analysis and Design Work-based Project																							
YEAR 2	COM528 - Object-oriented Design and Development																							
	COM519 - Advanced Database Systems																							
	COM526 - Introduction to Artificial Intelligence																							
	COM527 - Mobile Application Development																							
	COM530 - Business Organisation Management Work-based Project																							
	COM532 - IT Project Management Work-based Project																							
YEAR 3	COM624 - Machine Learning																							
	COM619 - DevOps																							
	COM618 - Data Science																							
	COM617 - Industrial Consulting Project																							
	COM625 - Synoptic Work-based IT Project/Presentation																							
	Other work-based tasks included in portfolio																							

Synoptic Project

Project Selection

image: Ian Mationg

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.

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

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**.

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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.

AE2

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.

AE3

Gateway

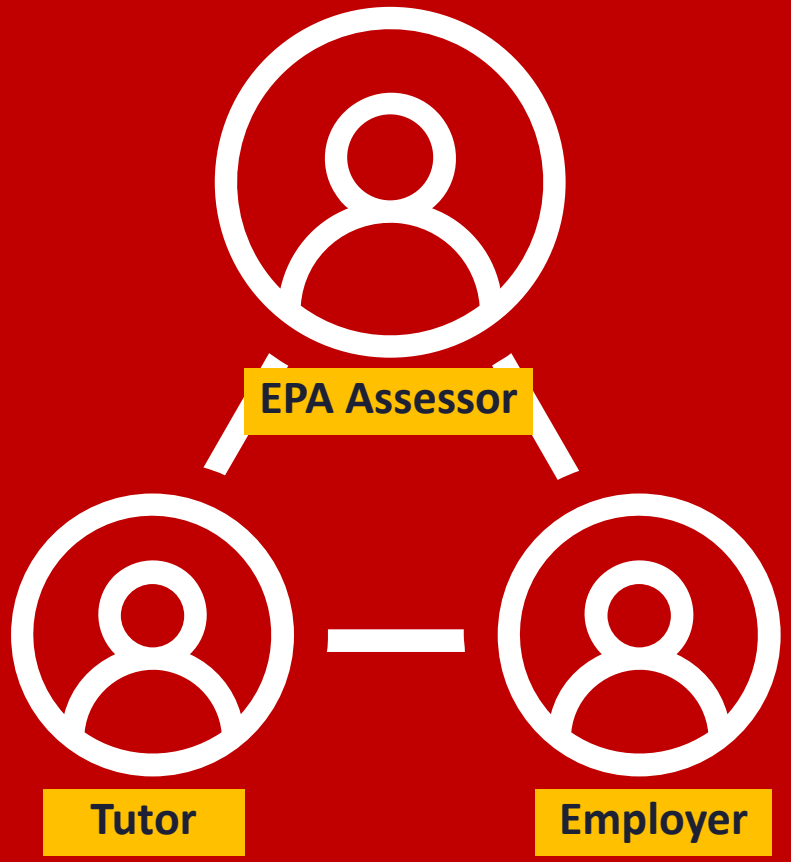
Upon completion of the on-programme off-the-job training, a **Gateway** meeting will be arranged to ensure that the apprentice has completed and passed all modules and is ready to progress to the End Point Assessment (EPA).

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

EPA

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)

INSTITUTE FOR APPRENTICESHIPS.ORG, 2015. DIGITAL INDUSTRIES -ASSESSMENT PLAN DIGITAL & TECHNOLOGY SOLUTIONS PROFESSIONAL BSC (Hons) Digital & Technology Solutions [viewed 14 February 2025]. Available from: https://www.instituteforapprenticeships.org/media/1073/digital_and_technology_solutions_professional.pdf

EPA Assessor

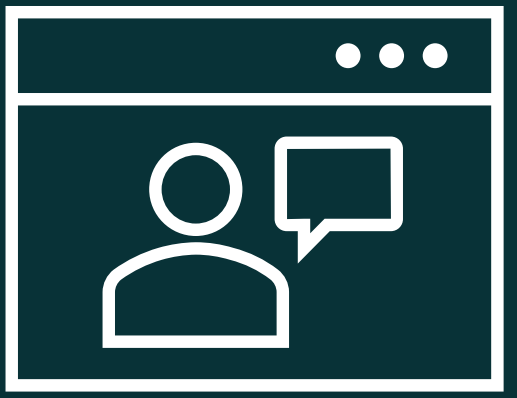
The EPA assessor will already have access to the Apprentice's Synoptic Project Report. They will need to formulate questions about the project, either using the provided question bank or by creating their own.

The Assessor will ask between 4 and 6 questions. They can also ask follow-up questions, provided that all questioning and discussion are completed within the allocated time frame

Employer Reference

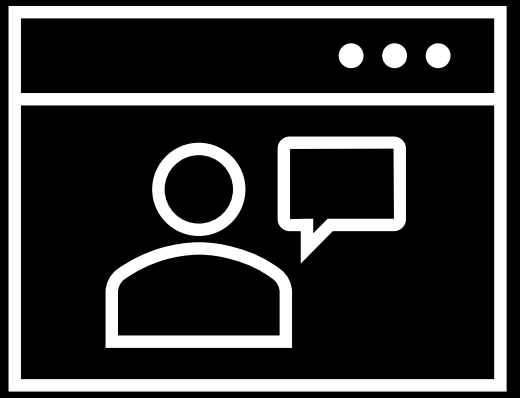
The assessment of the Synoptic Project should include the **employer's evaluation against the common criteria.** This will be documented in the **Employer's Reference**, completed and **signed off before the EPA Presentation.**

This will be discussed when working out the final grade and feedback in the assessment meeting following 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)
- A **conflict-of-interest** form must be completed to confirm that the Apprentice and Assessor do not know each other
- The Apprentice will **present for 25-30 minutes**, followed by a **Q&A session** within a **1-hour time slot**
- **The Apprentice will leave meeting**
- **Assessor, Tutor and Employer** collaboratively finalise grade and feedback (Report & Feedback)

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


A
B
C
D
E
F
G
H

1st (Distinction)				2:1 (Merit)			2:2 (Pass)			3rd (Pass)			Fail		
100	90-99	80-89	70-79	60-69			50-59			40-49			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
Extraordinary, flawless, publishable (or industry standard)	Superb, outstanding, original	Articulated, highly impressive, excellent,	Strong, proficient, very good	Competent, good, effective, capable			Reasonable, fair, appropriate			Basic, satisfactory, acceptable			Inadequate, incomplete, limited	Poor, unsatisfactory, weak	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			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		
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.

BSc Digital & Technology Solutions Degree Apprenticeship Synoptic Project EPA Assessment (Standard 1.1)

Apprentice Name			DATE
			Overall Grade

Solent KSB Codes	Area of competence	Assessment criteria		Add Grade using the Dropdown
Core Skills from the standard				
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