

BCS Professional Certificate in Agile Business Analysis Syllabus

Version 2.2 October 2020

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BCS Professional Certificate in Agile Business Analysis

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Change History

Any changes made to the syllabus shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and changes made. The purpose is to identify quickly what changes have been made.

Version Number	Changes Made		
Version 2.2 February 2021	Minor formatting.		
Version 2.1 October 2020	Updated exam details to reflect new MCQ format.		
Version 2.0	Syllabus revisions:		
October 2018	Sections 3 and 6: weightings changed		
	Section 1: addition of the POPIT model		
	 Section 5: addition of business context diagrams; clarification of system context diagrams 		
	 Section 6: minor rewording; removal of 6.3 and 6.4; addition of new 6.3 		
	 Section 8: addition of relative sizing estimation approach; removal of 8.3 		
	Section 10: addition of Adopting Agile		
Version 1.0	Syllabus created.		
October 2015			

Introduction

The BCS Professional Certificate in Agile Business Analysis assesses competence with regard to the philosophy, methods, principles and techniques of the Agile approach and its relevance to business analysis.

Assessment Objectives

The examination leading to the BCS Professional Certificate in Agile Business Analysis has the following assessment objectives.

Candidates must be able to demonstrate that they can:

- Describe the philosophy underpinning Agile approaches
- State the core Agile values in the agile manifesto
- Interpret the key Agile principles
- The application of Agile in the wider business context
- Describe a range of agile methods (process, roles, principles)
- Evaluate the applicability of an agile method for a given situation
- Analyse the stakeholders in Agile projects
- Apply the eight wastes of Lean
- Describe the FMM
- Illustrate the use of Agile analysis, modelling and documentation techniques
- Analyse business goals and their decomposition
- Identify and analyse user roles
- Analyse the application of the user story technique
- Explain the role and management of the solution backlog
- Explain techniques and meetings used to plan, estimate and manage an iteration
- Describe the role of the business analyst when using an Agile approach
- Apply the POPIT model and the system of interest model during Agile adoption

Target Audience

This certification is relevant for anyone wishing to understand the Agile approach from a business perspective. This includes business architects, business analysts, project managers and business managers.

Eligibility for this Examination

There are no pre-requisites for sitting this examination although candidates should be prepared to be assessed in line with the objectives listed in the previous section. While not compulsory, it is recommended that candidates attend a BCS accredited training course. Candidates should also understand the following techniques: CATWOE, Business Activity Model and Use Case Diagrams prior to attending an accredited course or sitting the examination.

Examination Format and Duration

Туре	40 Multiple Choice questions
Duration	90 minutes
Supervised	Yes
Open Book	No (no materials can be taken into the examination room)
Passmark	26/40 (65%)
Delivery	Digital or paper based.

Additional Time

For Candidates Requiring Reasonable Adjustments Due to a Disability.

Please refer to the <u>reasonable adjustments policy</u> for detailed information on how and when to apply.

For Candidates Whose Language is Not the Language of the Examination

If the examination is taken in a language that is not the candidate's native/official language, then they are entitled to:

- 25% extra time.
- Use their own paper language dictionary (whose purpose is translation between the examination language and another national language) during the examination. Electronic versions of dictionaries will not be allowed into the examination room.

Syllabus

For each top-level area of the syllabus a percentage and K level is identified. The percentage is the exam coverage of that area, and the K level identifies the maximum level of knowledge that may be examined for that area.

1. Agile Philosophy (10%, K4)

- 1.1 The rationale for adopting an Agile approach
 - Definition of Agile
 - 3 pillars of Agile
- 1.2 The Agile manifesto
- 1.3 The three overarching aspects of Agile
 - Principles
 - Methods
 - Techniques
- 1.4 Business Analysis thinking and how it is relevant in Agile business
 - Systems thinking
 - Service thinking
 - Lean business analysis
 - Lean thinking
 - o 8 wastes of Lean
 - Value proposition
 - The POPIT model

2. Agile Principles (5%, K3)

- 2.1 The 12 core principles
- 2.2 Key principle collaborative working
- 2.3 Key principle self organising teams
 - Tuckman & Jenson theory of group development
- 2.4 Key principle continuous improvement
 - Kaizen
 - DMAIC (from Lean)
- 2.5 Key principle iterative development and incremental delivery
- 2.6 Key principle building in change

3. Agile Methods (10%, K3)

- 3.1 Elements of a method
- 3.2 Defined V empirical methods
- 3.3 Characteristics of Agile methods
 - Product development methods
 - o SCRUM
 - o XP
 - Lean software
 - Scaled methods
 - o DSDM
 - o SAFe
- 3.4 Advantages and disadvantages of Agile methods

4. Understanding Stakeholders (10%, K3)

- 4.1 Stakeholder groups
 - Business Stakeholders: Project sponsor; Business Managers; Business Architect
 - Project Stakeholders: Project Manager; Programme Manager
 - Technical Stakeholders: Technical Architect
 - Development Team: Subject Matter Expert; End-users; Business Analyst; Designer;
 Team Leader; Solution Developer; Solution Tester

5. Agile Modelling (20%, K4)

- 5.1 Rationale and principles for Agile modelling
 - Levels of definition
 - Black box
 - White box
- 5.2 Hierarchy of models using the Functional Model Map (FMM)
 - Enterprise view
 - Business activity models
 - Business use case diagrams
 - Business context diagrams
 - System level view
 - Systems context diagrams
 - o System use case diagrams
 - System component view
 - component designs
- 5.3 MoSCoW prioritisation

6. Decomposing and organising business goals (5%, K4)

- 6.1 Goal decomposition and Functional decomposition
- 6.2 Benefits of a goal decomposition approach when using Agile
- 6.3 Iterations, releases and goals

7. Agile requirements (20%, K4)

- 7.1 Hierarchy of requirements and how this relates to agile projects
 - General
 - Technical
 - Functional
 - Non-functional
- 7.2 User Roles
 - Identifying and documenting user roles
 - Personas and extreme characters
- 7.3 User Stories
 - 3 Cs
 - INVEST
 - Techniques to elicit user stories:
 - Interviews
 - Surveys
 - Observation
 - Story-writing workshops
 - Scenario analysis

- Defining user stories
- Hierarchy of user stories
 - Themes
 - o Epics
 - User story
- Patterns for splitting epics: compound and complex
- Documenting non-functional requirements

8. Managing requirements (2.5%, K3)

- 8.1 The solution backlog
- 8.2 Managing the backlog
- 8.3 Estimation techniques:
 - Wideband Delphi
 - Relative sizing
 - Planning poker

9. Managing the iteration (15%, K4)

- 9.1 Planning the iteration
 - Iteration planning meeting
- 9.2 Calculating and utilising velocity
- 9.3 Techniques to manage the iteration:
 - Daily stand-ups
 - Agile boards
 - o Kanban
 - Burn down charts
 - Iteration reviews
 - Show and tell
 - Retrospectives

10. BA role in Agile projects (2.5%, K3)

- 10.1 Agile business analysis
 - The business view
 - The system view
 - Transition between the views
 - Exploring the system view: Scenarios; Storyboards; Wireframes; Prototyping
- 10.2 The Generalising Specialist
- 10.3 Agile adoption
 - The POPIT model
 - The system of interest model

Levels of Knowledge / SFIA Levels / Blooms

This course will provide candidates with the levels of difficulty / knowledge skill highlighted within the following table, enabling them to develop the skills to operate at the levels of responsibility indicated. The levels of knowledge and SFIA levels are explained in on the website www.bcs.org/levels. The levels of knowledge above will enable candidates to develop the following levels of skill to be able to operate at the following levels of responsibility (as defined within the SFIA framework) within their workplace:

Level	Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
K7		Set strategy, inspire and mobilise
K6	Evaluate	Initiate and influence
K5	Synthesise	Ensure and advise
K4	Analyse	Enable
K3	Apply	Apply
K2	Understand	Assist
K1	Remember	Follow

Question Weighting

Syllabus Area	Target number of questions
1 – Agile Philosophy	4
2 – Agile Principles	2
3 – Agile Methods	4
4 – Understanding Stakeholders	4
5 – Agile Modelling	8
6 – Decomposing and organising Business Goals	2
7 – Agile Requirements	8
8 – Managing Requirements	1
9 – Managing the Iteration	6
10 – BA Role in Agile Projects	1
Total	40 questions

Recommended Reading List

Title Agile and Business Analysis
Author Lynda Girvan and Debra Paul

Publication Date March 2017

Publisher BCS Learning and Development Ltd

ISBN 978 1780173221

Title Business Analysis 3rd Edition

AuthorDebra Paul, Donald Yeates and James CadlePublisherBCS, Learning and Development Limited

Publication Date September 2014 **ISBN** 9781780172774

Title <u>Disciplined Agile Delivery</u>
Author Scott Ambler and Mark Lines

Publisher IBM Press
Publication Date May 2012
ISBN 9780132810135

Title User Stories Applied: For Agile Software Development

AuthorMike CohnPublication DateMarch 2004PublisherAddison WesleyISBN978 0321205681

Agile Manifesto

www.scrumalliance.org

Additional Reading

The DSDM Agile Project Framework Handbook

Managing the Development of Large Software Systems by Winston Royce

Title Agile Retrospectives: Making Good Teams Great

Author Esther Derby, Diana Lawson

Publication Date August 2006

Publisher Pragmatic Bookshelf **ISBN** 978 0977616640

Title Agile Estimating and Planning
Author Mike Cohn & Addison Wesley

Publication DateNovember 2005PublisherPrentice HallISBN978 0131479418

Title Agile Software Development with SCRUM

Author Ken Schwaber and Mike Beedle

Publication DateOctober 2001PublisherPrentice HallISBN978 0130676344

Title <u>Mastering the Requirements Process</u>
Author Suzanne and James Robertson

Publication DateAugust 2012PublisherAddison WesleyISBN978 0321815743

Title Getting Started with Kanban

Author Paul Klipp
Publication Date February 2014

Publisher CreateSpace Independent Publishing Platform

ISBN 978 1495311970

Title <u>Lean Software Development: An Agile Toolkit</u>
Author Mary Poppendieck and Tom Poppendieck

Publication Date May 2003

Publisher Addison Wesley **ISBN** 978 0321150783

Title Writing Effective Use Cases: The Agile Software Development Series

AuthorAlistair CockburnPublication DateOctober 2000PublisherAddison WesleyISBN978 0201702255