V6.0	July 2025

SYLLABUS

REQUIREMENTS ENGINEERING

BCS PRACTITIONER CERTIFICATE

This professional certificate is not regulated by the following United Kingdom Regulators - Ofqual, Qualifications Wales, CCEA or SQA.

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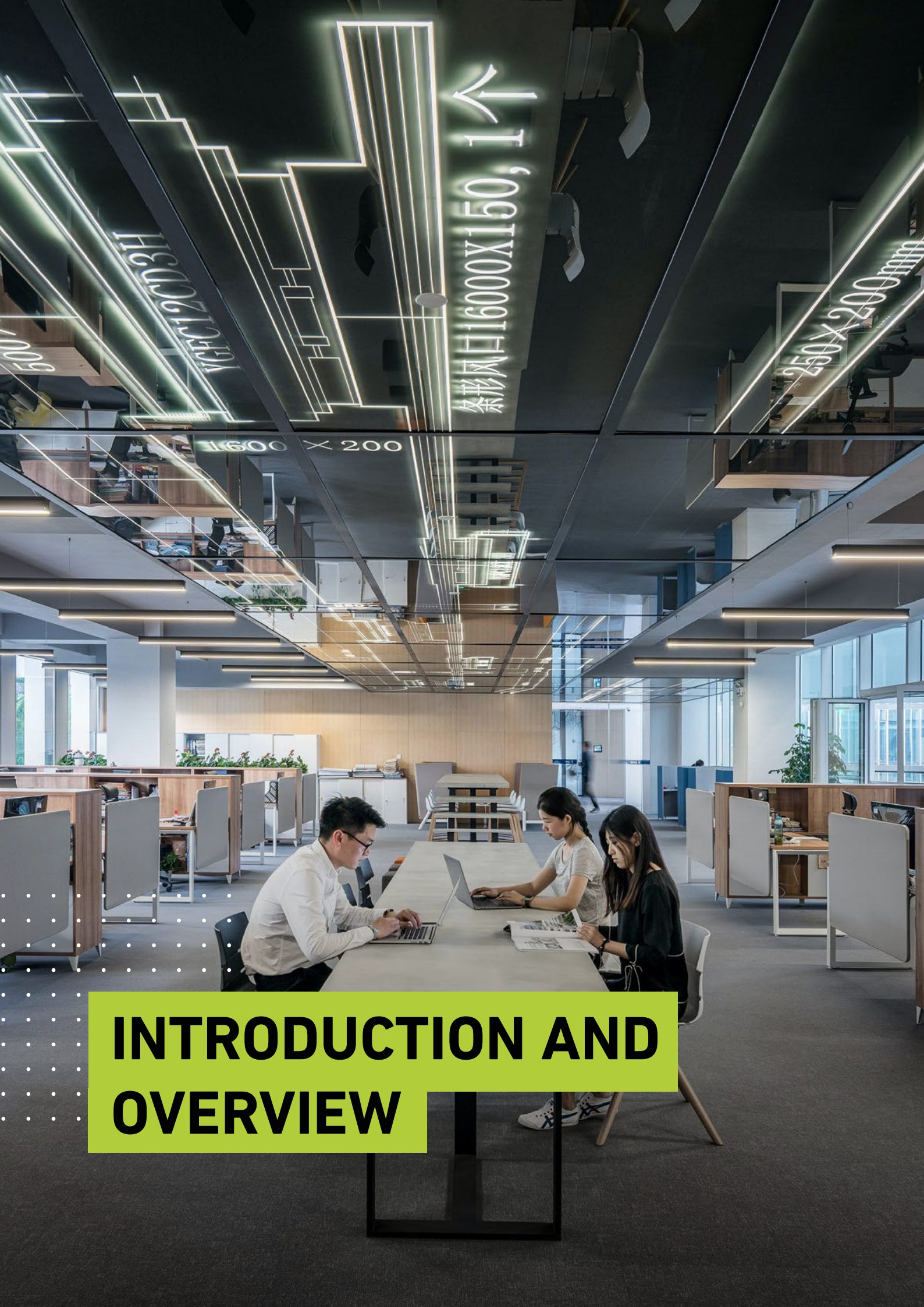


INTRODUCTION AND OVERVIEW

INTRODUCTION

The BCS Practitioner Certificate in Requirements Engineering is for candidates who want to develop or further their skills in the understanding and application of elicitation, analysis and management of requirements. As the traditional Business Analyst role develops and grows into other areas, the need for Requirements Engineering skills has opened up into the wider business and is now necessary in a variety of roles and teams. The learning in this certificate is shaped to place emphasis on valuable business analysis skills rather than the Business Analyst role. Focusing on these skills should ensure alignment with business objectives and a fit-for-purpose solution.

This syllabus provides an outline of the qualification including the learning objectives and assessment.

Further guidance on each **learning objective** (the "what", i.e. what you expected to know and be tested on) has been provided within each topic in the syllabus through the inclusion of **indicative content** (the "how", i.e. the main points/concepts to be covered in the learning and assessment) as well as general **guidance** (the "why", i.e. the relevance, context and expectations on how candidates may be tested on a particular learning objective where there is a need to apply or demonstrate their understanding of a topic).

LEARNING OUTCOMES

- Collaborate with stakeholders to ensure requirements align with business objectives
- Elicit different types of requirements and capture in appropriate documentation
- Analyse and validate requirements
- Ensure and manage requirement quality and change

QUALIFICATION SUITABILITY AND OVERVIEW

While there are no mandatory pre-requisites for candidates to be able to undertake this certificate, information within the Foundation Certificate in Business Analysis precedes the knowledge level of this certificate, providing candidates with understanding of documenting, managing and validating requirements. Candidates will likely find this useful. Candidates will also need to possess a good standard of written English.

This certificate will align with the updates made to the BCS Foundation Certificate in Business Analysis (launched Dec 2020) and has been developed with the Requirements Engineering Framework as a guide, with focus also on the Requirements Definition service.

This qualification has been designed to provide valuable learning for those in roles such as business analyst, business architect, business systems analyst, data analyst, enterprise analyst, management consultant, process analyst, product manager, product owner, project manager, and systems analyst.

This certificate provides value for candidates in entry-level, associate and management level roles.

Candidates can study for this award by attending a training course provided by a BCS accredited Training Provider or through self study.

TOTAL QUALIFICATION TIME	ASSESSMENT TIME
18 hours	60 minutes

TRAINER CRITERIA

It is recommended that to deliver this award effectively, trainers should possess one or more of the following:

- Hold a relevant qualification in Business Analysis or another, relevant discipline
- Have a minimum of 2 years' training experience
- Have a minimum of 3 years' practical experience in the relevant subject area

SFIA LEVELS

This award provides candidates with the level of knowledge highlighted within the table, enabling them to develop the skills to operate successfully at the levels of responsibility indicated.

LEVEL	LEVELS OF KNOWLEDGE	LEVELS OF SKILLS 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**

For further information regarding the SFIA Levels

https://www.bcs.org/it-careers/sfiaplus-it-skills-framework/

SFIA*PLUS*

This syllabus has been linked to the SFIA knowledge, skills and behaviours required at level 4 for an individual working in the following subject areas.

KSB04

Identifying gaps in the available information required to understand a problem or situation and devising a means of resolving them.

KSB12

Understanding commercial considerations and ensuring alignment with them when making decisions or recommending actions.

KSB22

Establishing relationships, contributing to an open culture and maintaining contacts with people from a variety of backgrounds and disciplines. Effective, approachable and sensitive communicator in different communities and cultures. Ability to adapt style and approach to meet the needs of different audiences.

KSC04

Applying techniques which help investigating, analysing, modelling and recording a business area or system of interest. Example, but not limited to: business environment analysis and process modelling.

KSC09

Using tools (manual or automated) to record the structure, relationships and use of information within an organisation. Examples, but not limited to class diagram and relational data model

KSC84

Understanding and application of different development approaches e.g. iterative/ incremental methodologies (Agile, XP, TDD, SCRUM) or traditional sequential methodologies (Waterfall or V-Model) and their energy and resource footprints. Irrespective of development methodology a DevOps approach may also be taken where development and operational staff work collaboratively.

KSD04

The selection and application of information elicitation methods, tools and techniques which are appropriate to the information required and the sources available. Examples, but not limited to: focus groups and surveys/questionnaires.

SYLLABUS

1. REQUIREMENTS DEFINITION AS A SERVICE (5%) K3

Recommended reading for this key topic:

i. Business Analysis 4th Edition Glossary, Chapters 4 and 10
Agile and Business Analysis 2nd Edition Chapter 9

1.1 Describe the elements that form the requirements definition service

Indicative content

a. Service description
b. Service value proposition
c. Service activities
d. Service techniques

Guidance

Candidates will be tested on their ability to describe what a requirement is, and the requirements definition service, including its Value Proposition, Activities and Techniques, as per the Business Analysis Service Framework (BASF).

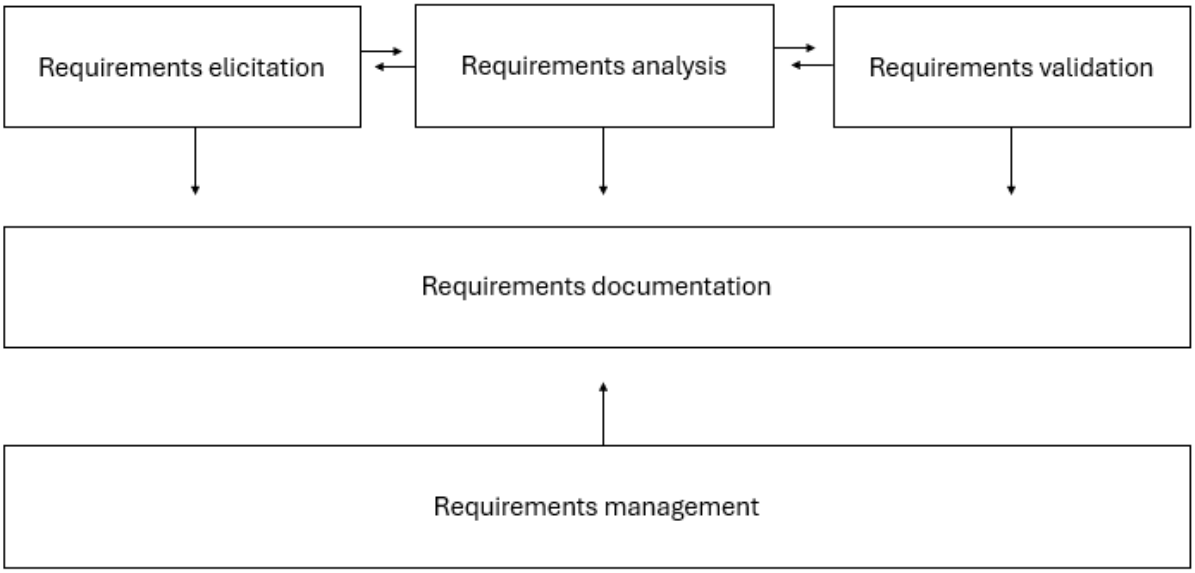
REQUIREMENTS DEFINITION

"THIS SERVICE IS CONCERNED WITH ELICITING, ANALYSING AND DEFINING THE REQUIREMENTS THAT ARE TO BE FULFILLED BY A NEW OR ENHANCED BUSINESS OR IT SYSTEM."

BCS 'BUSINESS ANALYSIS' 4th Edition

1.2 Describe stages of the RE framework and how to plan the approach

a.



Indicative content

b. Planning the requirements approach

Describe how each of the following have an impact planning an RE approach:

- Project approach
- Organisational standards in place
- Stakeholders involved
- Techniques to be used
- Requirement documentation to be produced

Guidance

Candidates will be tested on their ability to describe every stage of the RE Framework - Elicitation, Analysis, Documentation, Validation and Management - and the types of activities that the Business Analyst (BA) undertakes at each stage.

Candidates will also be tested on their ability to describe the considerations that should be made when planning for a Requirements Engineering activity .

A BA should be able to use the RE framework in a project from start to finish. However, it is common for BAs to be brought in part way through a project. Therefore, it is important that BAs are able to quickly understand ongoing projects and act accordingly.

Candidates will be tested on their ability to analyse a given scenario and explain which stage of the RE framework is applicable and provide appropriate responses and actions to the scenario.

2. ELICITING REQUIREMENTS (20%) K3

Recommended reading for this key topic:

i. Business Analysis 4th Edition Chapters 5 and 10
Agile and Business Analysis 2nd Edition Chapters 10 and 11

2.1 Explain the relevant strengths and limitations of elicitation techniques in terms of stakeholder knowledge types and behaviours

Indicative content

a. Workshops (including techniques that can be used during a workshop)
b. Interviews (including questioning techniques that can be used during an interview)
c. Document analysis
d. Scenarios
e. Storytelling
f. Prototypes (low and high fidelity)
g. Observation
h. User role analysis

Guidance

Elicitation is concerned with purposefully extracting requirements from stakeholders.

To successfully elicit requirements, BAs will need to apply a combination of elicitation techniques to ensure the appropriate volume and depth of information is secured for analysis. Understanding knowledge types (tacit and explicit) is integral to the requirements elicitation approach.

Candidates will be tested on their ability to explain how the different methods of elicitation are executed, how the method supports the extraction of the different types of knowledge and what potential outcomes can be expected when the elicitation technique is applied.

2.2 Explain the use of prototyping to elaborate requirements

Indicative content

a. Selecting the appropriate type of prototype (low/high fidelity; throwaway or evolutionary)
b. Visualisation of requirements
c. Increase stakeholder understanding
d. Managing expectations when using a prototype
e. Extended use of prototypes to support analysis and documentation

Guidance

Prototyping can take many forms such as manual/hand drawn mock-ups, images of screens, genuine software development etc. The useful common feature and purpose of these prototypes is the creation of visual or physical example, with which stakeholders can interact and provide feedback on.

Candidates will be tested on their ability to explain which type of prototype might be appropriate for a given scenario, how they might use it and what outcomes they should anticipate.

2.3 Analyse a given scenario and apply appropriate elicitation techniques

Indicative content

a. How to select an appropriate elicitation technique
b. Plan/prepare for its use
c. Explain execution of technique
d. Describe the anticipated outcome/output

Guidance

Candidates will be tested on their ability to analyse a given scenario and apply appropriate elicitation techniques.

3. DOCUMENTING REQUIREMENTS (25%) K3

Recommended reading for this key topic:

i. Business Analysis 4th Edition Chapters 10 and 11
Agile and Business Analysis 2nd Edition Chapters 10, 11, 12 and 13

3.1 Describe the different requirement types

Indicative content

a. Business (general, technical)
b. Solution (functional, non-functional)

Guidance

Each type of requirement focuses on different aspects of the future solution. Therefore, it is important that the candidates can confidently categorise requirements by type.

Candidates will be tested on their ability to describe the different types of requirements. Candidates will also be tested on their ability to review a given requirement and identify the type.

3.2 Explain how requirements are documented and apply best practice to authoring and capturing requirements

Indicative content

a. Diagrammatic documentation such as data model, function model, business activity model, business process model
b. Text-based documentation, such as requirements catalogue, business requirements documentation (BRD), user story, backlogs
c. Selecting the appropriate style(s) of documentation

Guidance

It is important to clearly define what should be delivered. While there are different approaches to documenting the different aspects of requirements, the main focus is to provide it in an easily accessible format and to select the appropriate documentation for the project approach. Consistency of documentation promotes effective communication between stakeholders and the basis of subsequent analysis and validation.

Candidates will be tested on their ability to explain the different styles of requirements documentation and will also be assessed on their ability to apply best practice to requirements authoring.

4. ANALYSING REQUIREMENTS (25%) K3

Recommended reading for this key topic:

i. Business Analysis 4th Edition Chapters 7, 9, 10, 11 and 13
Agile and Business Analysis 2nd Edition Chapters 6, 8, 9, 10, 11 and 13

4.1 Explain the purpose of analysing requirements

Indicative content

a. Issues that contribute to poorly articulated or incomplete expressions of need
b. Tasks undertaken as part of requirements analysis (such as refining, categorising, prioritising and modelling)
c. Goal of analysing requirements

Guidance

When multiple elicitation techniques have been used to extract requirement information, the output can often take multiple forms, contain different levels of detail or understanding. The Business Analyst must recognise that raw output from the selected elicitation techniques, needs to be analysed both in terms of each individual requirement and as a collective or "set" of requirements.

Candidates will be tested on their ability to explain the types of issues that might be encountered following requirements elicitation and why they may occur. They will also be able to describe how they will assess whether the output from requirements analysis is complete, well organised and appropriately documented.

4.2 Analysing requirements - refine a set of requirements

Indicative content

Filters:

a. Unravelling multiple requirements
b. Checking for overlapping or duplicate
c. Removing conflicts
d. Evaluating feasibility
e. Confirming relevance of the requirement
f. Checking for solutions

Guidance

Once requirements have been elicited and captured initially in some form of documentation, it is important to conduct requirement analysis to ensure that each requirement is distinct and belongs as part of the set. Analysis filters are criteria used to analyse and refine requirements. They help to identify ambiguities and inconsistencies.

Candidates will be tested on their ability to describe a technique to refine a set of requirements, for a given scenario. They will be able to identify the issues they have encountered within the scenario and the techniques that would be appropriate to resolve them.

4.3 Analysing requirements - refine an individual requirement

Indicative content

a. INVEST
b. Quality criteria:
   - Clear
   - Concise
   - Relevant
   - Unambiguous
   - Correct
   - Testable
   - Traceable

Guidance

In addition to being part of a well-formed set of requirements, each individual requirement should meet a clearly defined set of criteria to be considered well-formed, clear and complete.

Candidates will be tested on their ability to define a requirement statement for a given scenario, ensuring it meets the quality characteristics or explaining why it does not.

4.4 Explain additional methods used to analyse and organise requirements

Indicative content

a. Slicing/splitting requirements
b. Analysing Business Rules
c. Categorising requirements
d. Requirements Hierarchy
e. Prioritising requirements (including MoSCoW, Priority Levels, Kano, WSJF, AHP)
f. Modelling to analyse requirements (such as CRUD matrix, data models (UML/ERD class models), functional models, activity models, business process models, customer journey mapping)

Guidance

These additional requirements analysis techniques support the Business Analyst in ensuring the requirements they produce are well formed, within the agreed scope and boundary of the project, appropriately presented and truly represent the needs of the business.

Candidates will be tested on their ability to explain the different methods. They will need to be able to explain the purpose of each type of analysis and what would be achieved by applying it. The candidate will also be tested to their ability to explain why and how requirements should be organised in readiness for requirements validation.

5. VALIDATING REQUIREMENTS (10%) K3

Recommended reading for this key topic:

i. Business Analysis 4th Edition Glossary, Chapters 10, 12
Agile and Business Analysis 2nd Edition Chapter 9

5.1 Explain the purpose of validating requirements

Indicative content

a. The objective of validating requirements
b. Confirm requirements are accurate
c. Validate that requirements are aligned to business goals, project and business objectives and scope
d. Agree requirements are suitable for solution design and build activities
e. In Linear projects: agree acceptance criteria is clearly defined, understood and agreed as a basis for User Acceptance Testing
f. In Agile projects: agree requirements form an appropriate basis for futher elaboration

Guidance

Requirements validation involves the review of requirements conducted by a selected group of stakeholders with the aim to agree that the requirements state the features and characteristics fulfilled by the solution.

Candidates will be tested on their ability to explain the purpose of validating requirements, to justify the need for validation, and the consequences if they are not validated.

5.2 Explain the roles and responsibilities of stakeholders during requirements validation

Indicative content

a. Business analyst
b. Business sponsor
c. Business owners
d. SMEs
e. Solutions architect
f. Developers
g. Testers
h. Project office representatives

Guidance

Validation should include people who represent key project or business roles. Each role has a different responsibility when validating the requirements, and each comes with their own perspective. It is important to obtain validation from different perspectives.

Candidates will be tested on their ability to explain the roles and responsibilities of the review group during requirements validation.

5.3 Explain different approaches to requirements validation

Indicative content

a. Informal review - Agile/Linear
b. Formal review - Agile/Linear
c. Possible outcomes of requirements validation
   - Rejected - rework required
   - Amendment required
   - Agreed - signed off/baselined requirements, backlog established or 'ready' status
d. The two stages of Agile requirements validation

Guidance

The approach to validation may vary depending on the project approach and the availability of stakeholders.

Candidates will be tested on their ability to explain the reasoning for various approaches to requirements validation, and when in the requirements engineering framework they should occur.

Candidates will also be tested on their ability to describe for a given scenario how a requirement validation review would be planned and executed, along with the action they should take for each possible outcome.

6. MANAGING REQUIREMENTS (15%) K3

Recommended reading for this key topic:

i. Business Analysis 4th Edition Glossary and Chapter 12
Agile and Business Analysis 2nd Edition Chapter 9

6.1 Explain the rationale of requirements management, and the elements of requirements management.

Indicative content

a. Rationale for when requirements management occurs in the Requirements Engineering Framework
b. Elements of requirements management
- Identification
- Cross-referencing
- Origin and ownership
- Software support
- Change control
- Configuration management
- Maintaining traceability
  - Horizontal traceability (backwards from, forwards to)
  - Vertical traceability (trace up, trace down)

Guidance

During the Elicitation, Analysis and Documentation stages of the RE Framework, key information about each requirement is captured. Once the requirement has been agreed, during Validation, that information must be kept up to date, while the solution is being developed. Requirements management ensures this maintenance occurs, providing ongoing traceability which is particularly useful in times of solution negotiation or business change. Good requirements management will allow the Business Analyst to respond effectively during ongoing project activities.

Candidates will be tested on their ability to explain the purpose and rationale of requirements management and to describe the main elements of requirements management.

6.2 Managing changes to requirements

Indicative content

a. Change control process
b. Possible outcomes: implement or reject
c. The impact of change to configuration management

Guidance

Change control is a vital element of requirements management, the purpose of which is to create a robust audit trail of any changes made to requirements and ensure that any changes made are impact assessed and justified.

Candidates will be tested on their ability to apply a change control process to a given scenario and explain how the change would impact any artefacts subject to configuration management.

EXAMINATION FORMAT

This award is assessed by completing an invigilated online exam that candidates will only be able to access at the date and time they are registered to attend.

Adjustments and/or additional time can be requested in line with the BCS reasonable adjustments policy for candidates with a disability or other special considerations, including English as a second language.

TYPE

FORTY MULTIPLE CHOICE AND MULTIPLE RESPONSE QUESTIONS

DURATION

60 MINUTES

SUPERVISED

YES

THIS AWARD WILL BE SUPERVISED

OPEN BOOK

NO

(NO MATERIALS CAN BE TAKEN INTO THE EXAMINATION ROOM)

PASSMARK

(65%)

26/40

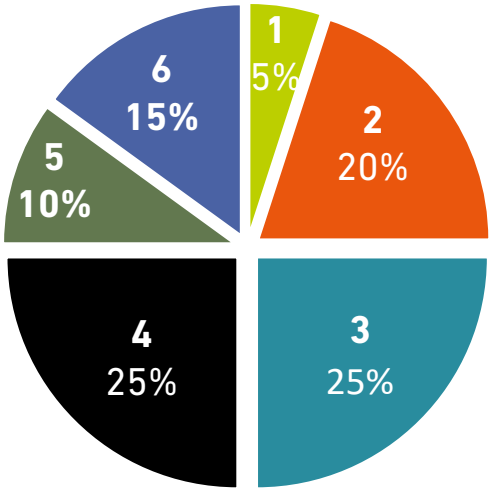
DELIVERY

DIGITAL FORMAT

QUESTION WEIGHTING

Each primary subject heading in this syllabus is assigned a percentage weighting. The purpose of this is:

- Guidance on the proportion of content allocated to each topic area of an accredited course.
- Guidance on the proportion of questions in the exam.



Syllabus Area		Question Type
1	Requirements definition as a service	Multiple choice and multiple responses.
2	Eliciting requirements	Multiple choice and multiple responses.
3	Documenting requirements	Multiple choice and multiple responses.
4	Analysing requirements	Multiple choice and multiple responses.
5	Managing requirements	Multiple choice and multiple responses.
6	Validating requirements	Multiple choice and multiple responses.

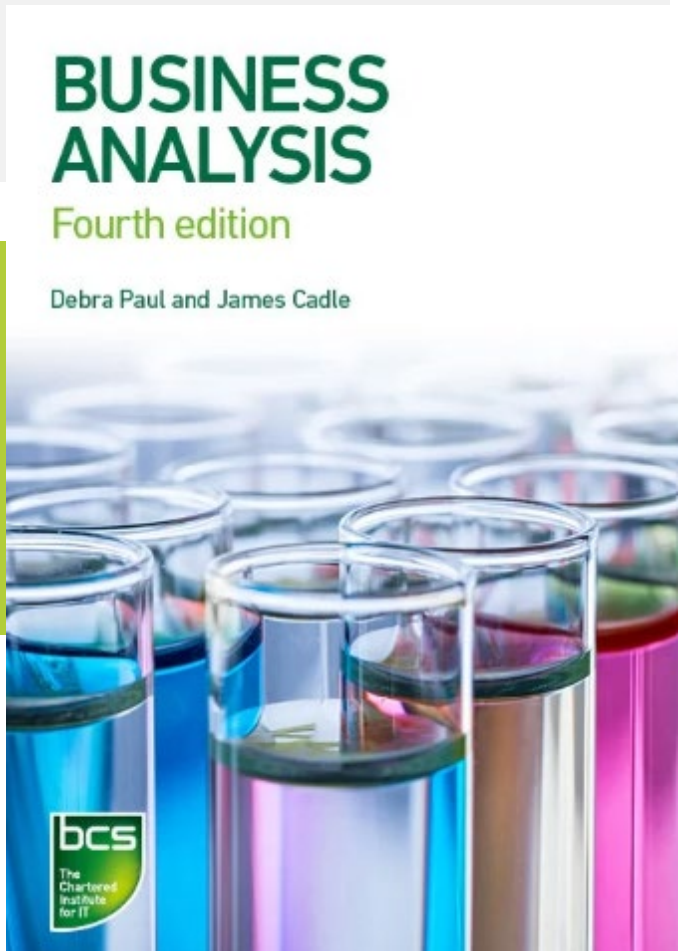
RECOMMENDED READING

The following titles are suggested reading for anyone undertaking this award. Candidates should be encouraged to explore other available sources.

TITLE: Business Analyis (4th Edition)
AUTHOR: Debra Paul and James Cadle
PUBLISHER: BCS
PUBLICATION DATE: *July 2020*
ISBN: *9781780175102*

TITLE: Business Analysis Techniques: 123 essential tools for success
AUTHOR: James Cadle, Debra Paul, Jonathan Hunsley, Adrian Reed, David Beckham, Paul Turner
PUBLISHER: BCS
PUBLICATION DATE: *August 2021*
ISBN: *9781780175690*

TITLE: Agile and Business Analysis (2nd Edition)
AUTHOR: Lynda Girvan, Debra Paul
PUBLISHER: BCS
PUBLICATION DATE: *March 2024*
ISBN: *9781780176192*



USING BCS BOOKS

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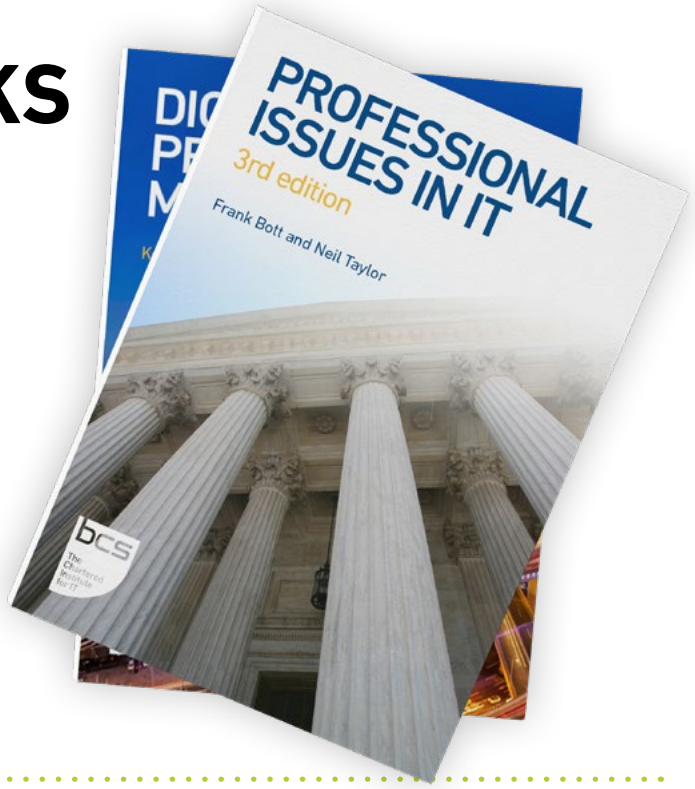

DOCUMENT CHANGE HISTORY

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 1.0	Document created.
Version 2.2	This is the first version of the extended RE syllabus. The version number is unchanged so that it is consistent with the existing RE syllabus. The syllabus has been extended to support the centralised RE examination. The original syllabus is defined in black and the extensions in red. A commentary has been added to aid candidates preparing for the centralised examination.
Version 2.3	Updated language requirements for extra time and use of dictionaries. Minor updates made to the commentary. Standardised the trainer requirements.
Version 2.4	Strapline regarding regulated statement has been added.
Version 2.5	Centralised exam pass mark clarified.

VERSION NUMBER	CHANGES MADE
Version 3.0	Change History introduction updated; Standardisation of use of capitals; full stops added to end of every bullet/paragraph; 'Objectives' changed to 'Learning Objectives' throughout and formatting updated to achieve uniformity across the portfolio. Updated learning outcomes. Updated section headings and standard template text to align with other documents in the portfolio. Exam format updated to MCQ and open book.
Version 4.0	Amended to closed book. Pass mark details amended post Angoff review. Required and recommended reading list confirmed
Version 4.1	Addition of Trainer Criteria and Classroom Size ratios. Additional wording of clarification to the passmark.
Version 5.0	Full review of key topics, learning outcomes and exam structure. Addition of indicative content and guidance for each topic and criteria.
Version 5.1	Reading chapter references included in topc areas.
Version 6.0	Full review of key topics, learning outcomes and exam structure. Addition of indicative content and guidance for each topic and criteria.

CONTACT

BCS wants every apprentice to have the best possible experience in their end-point assessment. If you require further support to achieve this, please contact us:

Your BCS Key Account Manager in the first instance.
epateam@bcs.uk for scheduling queries
epa.quality@bcs.uk for queries relating to results

If you have any queries relating to the online assessments, please contact;
Service Delivery - eprofessional@bcs.uk

For further information, please contact:

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