# BCS International Diploma in Business Analysis

## Syllabus

bcs
The Chartered Institute for IT

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# Introduction

The BCS International Diploma in Business Analysis is an internationally recognised certification that enables candidates to validate their knowledge, skills and ability.

The Diploma is designed for business and IT professionals who want to demonstrate they have a detailed understanding of business analysis best practice and sets a standard against which business analysts may be assessed.

The assessment for this qualification focuses on candidates' practical skills and requires them to demonstrate their application of knowledge and understanding to given situations or contexts. During the assessment, examiners may ask questions that require candidates to connect different areas of the syllabus.

The assessment tests each candidate's ability to understand how to conduct business analysis in a given context or situation, and to justify the rationale for the proposed approach. It is not intended to replicate the examination of knowledge of the individual tools and techniques already proven within the component modules.

For BCS members it also allows entry onto the professional registration for IT technicians (RITTech).

# Qualification Suitability and Overview

This qualification is aimed at business and IT professionals who wish to demonstrate that they have a detailed understanding of business analysis best practice.

The **entry criteria** for this examination are:

- Examination passes in the BCS Certificates in Business Analysis Practice and Requirements Engineering
- An examination pass in one of the knowledge-based specialist modules defined below
- An examination pass in one of the practitioner specialist modules defined below

It is recommended that candidates sit the oral examination within 12 months of completing the pre-requisite modules.

## Knowledge-Based Specialist Modules

- BCS Foundation Certificate in Business Analysis
- BCS Foundation Certificate in Business Change
- BCS Foundation Certificate in Project Management
- BCS Certificate in Organisational Behaviour*

*Organisational Context or Commercial Awareness (predecessors to Organisational Behaviour) is accepted as a knowledge-based specialism.

## Practitioner Specialist Modules

- BCS Certificate in Modelling Business Processes
- BCS Certificate in Benefits Management and Business Acceptance
- BCS Certificate in Systems Development Essentials
- BCS Certificate in Systems Modelling Techniques
- BCS Certificate in Data Management Essentials

## IIBA Exemption

Candidates holding the IIBA CBAP qualification are exempt from the BCS Certificate in Requirements Engineering and the knowledge-based specialist module.

## IREB Exemption

Candidates who have completed IREB's Certified Professional for Requirements Engineering (CPRE) Foundation level will be exempt from taking the BCS Certificate in Requirements Engineering to achieve their Business Analysis Diploma.

Candidates who have completed the BCS Certificate in Requirements Engineering will be exempt from taking the IREB CPRE Foundation level to progress to the IREB's Advanced level.

# SFIA Levels

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

| 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 |

The knowledge levels that apply to this syllabus are K2 – K5, which means that examination questions will test the candidate's understanding of the relevant syllabus topics at these levels only.
Example questions for each level are provided below.

| Level | Sample Question |
|---|---|
| K2 | What is the purpose of producing a business case before initiating a project? |
| K3 | In the scenario just described, how would you organise a workshop to identify the solution requirements? |
| K4/5 | If you were at the start of a new business analysis assignment to help improve the effectiveness of a particular business area, what would you do first? |

## SFIA Plus

This syllabus has been linked to the SFIA knowledge skills and behaviours required at level 5 for an individual working in business situation analysis.

## KSB05

Keeping organisational objectives and strategies in mind, and ensuring courses of action are aligned with the strategic context.

## KSC04

Expert in applying techniques that help investigating, analysing, modelling and recording a business area or system of interest.

## KSC38

Familiar with the business environment relating to own sphere of work (own organisation and/ or closely associated organisations, such as customers, suppliers, partners and competitors), in particular those aspects of the business that the specialism is to support (i.e. localised organisational awareness from a technical perspective).

## KSD01

Proficient in methods, tools and techniques to analyse and optimise processes in order to improve the quality of a product or service.

### KSD04

Expert in the selection and application of information elicitation methods, tools and techniques that are appropriate to the information required and the sources available.

### KSD85

Expert in establishing relationships, analysing perspectives and managing stakeholders from a variety of backgrounds and disciplines. Adapting stakeholder engagement style to meet the needs of different audiences. The identification of key business stakeholders and an assessment of their level of power and interests, and their perspectives to inform the way(s) in which they should be considered and managed.

### KSD07

Familiar with organisational structures; their mission, objectives, strategies and tactics adopted by organisations; measures of performance such as critical success factors and key performance indicators; organisational cultures and cultural dimensions.

Further detail around the SFIA Levels can be found at www.bcs.org/levels.

# RITTech Registration

RITTech is the independent competency standard for technical professionals which recognises the vital work you do to build and maintain our digital world. By benchmarking your abilities against the professional RITTech standard, you show that you care about doing things properly, you understand your impact in the industry and you are keeping your skills up to date.

It's the difference between saying you can, and proving it. With the letters RITTech after your name and a spot on the public RITTech register, there's no better way of confirming to employers and customers that you are the best person for the job.

### Why register?

- Prove you have the technical skills you say you have.
- Build your reputation as a trusted and ethical professional.
- Enjoy wider industry recognition and influence in your organisation.
- Take your role to the next level and boost your career potential.

**If you have any queries relating to RITTech registration, please contact RITTech@bcs.uk.**

# Additional Time for Candidates Due to a Disability

Candidates who have a disability which may impact their ability to take and pass the oral interview may be eligible for additional time. An example would be if a candidate has a speech impediment. Please advise BCS at the time of booking the oral examination.

Where candidates have been granted extra time during the oral examination, BCS will try to allocate the final interview slot of the day so that there are fewer time restrictions. Please inform BCS as early as possible so that the best time slot can be allocated. In exceptional circumstances, it may be possible to allow written responses to the interview questions.

# Structure of the Examination

The examination is conducted by two oral examiners and lasts for 50 minutes. Candidates are not allowed to take any written material into the oral examination. The questions are concerned with the application of the business analysis techniques and approaches defined in this syllabus and the practitioner specialist module syllabus nominated by the candidate.

# Objectives of the Oral Examination

The objectives of this oral examination are:

- To assess the candidate's level of knowledge of the business analysis topics defined in this syllabus.
- To assess the candidate's ability to apply the business analysis techniques defined in this syllabus to given situations or contexts.

# Syllabus

While the syllabus is expressed in terms of separate sections, as this is an oral examination, candidates should expect:

- To be questioned on the sections described.
- To be asked to apply techniques to situations that may be described.
- To link techniques from different sections of the syllabus together where relevant. Questions will follow a natural conversational flow and not be bound by the sequence of the syllabus.

# 1. The Business Context (K Level 4/5)

**1.1** The rationale for business analysis.

Explain the rationale for business analysis.

## Indicative content

a. Why is business analysis important?
b. What benefits can business analysis offer organisations?

## Guidance

Understanding of the full breadth of the role of a business analyst from strategic context and definition to detailed changes to screens or components of IT systems.

Candidates should be able to explain how the services offered under the Business Analysis Service Framework allow organisations to generate better questions, answers and options for the problems and opportunities that they face at all levels.

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**1.2** The holistic view of a business system.

Explain the holistic view of a business system and describe its application.

## Indicative content

a. The importance of taking a holistic view.
b. Aspects of a holistic view:
   i. People.
   ii. Process.
   iii. Organisation.
   iv. Information and Technology.

## Guidance

Understanding of the benefits of using a holistic view and the issues that may arise if that holistic view is not taken. The interactions between the elements of the holistic view are able to describe the potential impacts of change and potential issues within organisations.

Understanding that information and technology, while related and often intertwined in modern organisations, are separate elements that deliver the information an organisation needs to make decisions and operate, and the communication mechanisms to get the information to the people in the organisation who need it to be able to make the best use of it.

Figure 1 - The POPIT model showing the views of a business system
Business Analysis (4th Edition) © Assist Knowledge Development Ltd.

**1.3** Competencies of a business analyst.

Apply the competencies of a business analyst.

### Indicative content

a. Business domain knowledge.
b. Personal qualities.
c. Professional techniques.

### Guidance

An understanding of the groups of competencies of the business analyst role, and why they are all relevant to the delivery of business analysis services. Candidates will be expected to know what these areas are and why they are important to the role.

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**1.4** Professionalism in business analysis.

Demonstrate professionalism in business analysis.

### Indicative content

a. The role of BCS in professional development of business analysts.
b. The importance of a code of conduct/professional standards.

### Guidance

An understanding that, while not a profession in the legal sense of the word, business analysis has many attributes of a profession (a professional body, standards, qualifications, etc).

An understanding of the existence of a professional code of conduct that is embedded in this qualification and the implications of its existence on the conduct of professional business analysts as a result.

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**1.5** Business environment analysis.

Demonstrate the application of business environment analysis.

### Indicative content

a. One technique to analyse the influences from the external business environment.
b. One technique to analyse the capability of the internal business environment.

### Guidance

**External environment**

Apply a recognised technique to explain why and how the external business environment is important. Some examples of techniques are:

a. Porter's Five Forces – Threat of new entrants, bargaining power of suppliers, bargaining powers of buyers, threat of substitute products and industry competitors.

b. PESTLE – Political, Economic, Socio-cultural, Technological, Legal and Environmental factors.

**Internal environment**

Use a recognised technique to explain why the internal business environment is important. Some examples of techniques are:

a. VMOST – Vision, Mission, Objectives, Strategy and Tactics.

b. Resource audit - Can be applied by considering and analysing resource types – Physical, Financial, Human, Know-how and Reputation. These techniques may be applied to analyse the strengths and weaknesses which exist internally in an organisation.

**1.6** SWOT analysis.

Demonstrate understanding of the application of SWOT analysis from the analysis of the organisational environment.

### Indicative content

a. Links to the internal business environment analysis (strengths and weaknesses).
b. Links to the external business environment analysis (opportunities and threats).
c. Using the SWOT analysis.

### Guidance

A SWOT analysis is used to analyse the current state of both the internal and external organisational environment. Identifying the strengths, weaknesses, opportunities and threats which exist in an organisation, helps the analyst to understand the strategic context around their activity. Strengths and weaknesses are found internally in an organisation, opportunities and threats are from the external environment.

Candidates should expect to be asked to discuss the use of a SWOT analysis to define how and what a given piece of work will be looking to address or consider.

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**1.7** Business performance measurement.

Explain the rationale for, and apply, business performance measurement techniques.

### Indicative content

a. Critical Success Factors (CSFs).
b. Key Performance Indicators (KPIs).
c. Performance targets.
d. The link between CSFs, KPIs and performance targets.
e. The Balanced Scorecard.

### Guidance

Performance measurement tools are used to establish how an organisation is performing in its current state, against the organisation's objectives and strategy.

Balanced Scorecard (Balanced Business Scorecard - BSC) is made up of four performance areas - financial, internal business process, learning and growth and customer.

Candidates will be expected to understand how to apply the techniques and where the information they contain is obtained from and used, both in the organisation and in other techniques and models.

**1.8** Business analysis within the lifecycle for business change.

Use business analysis within the lifecycle for business change.

## Indicative content

a. Stages of the lifecycle:
   i. Alignment.
   ii. Definition.
   iii. Design.
   iv. Implementation: the emotional curve and organisational culture.
   v. Realisation.
b. Key differences between linear and iterative solution delivery approaches.

## Guidance

Understand the relevance and use of the below Business Change Lifecycle in planning, delivering and measuring the benefits of a change.

Demonstrate an understanding of the differences between linear and iterative approaches and the ability to appropriately select an approach in different circumstances. There are compelling circumstances for both approaches to be used.

The importance of considering this as a 'direction' of travel and not a 'hard and fast' set of stages that are to be followed.
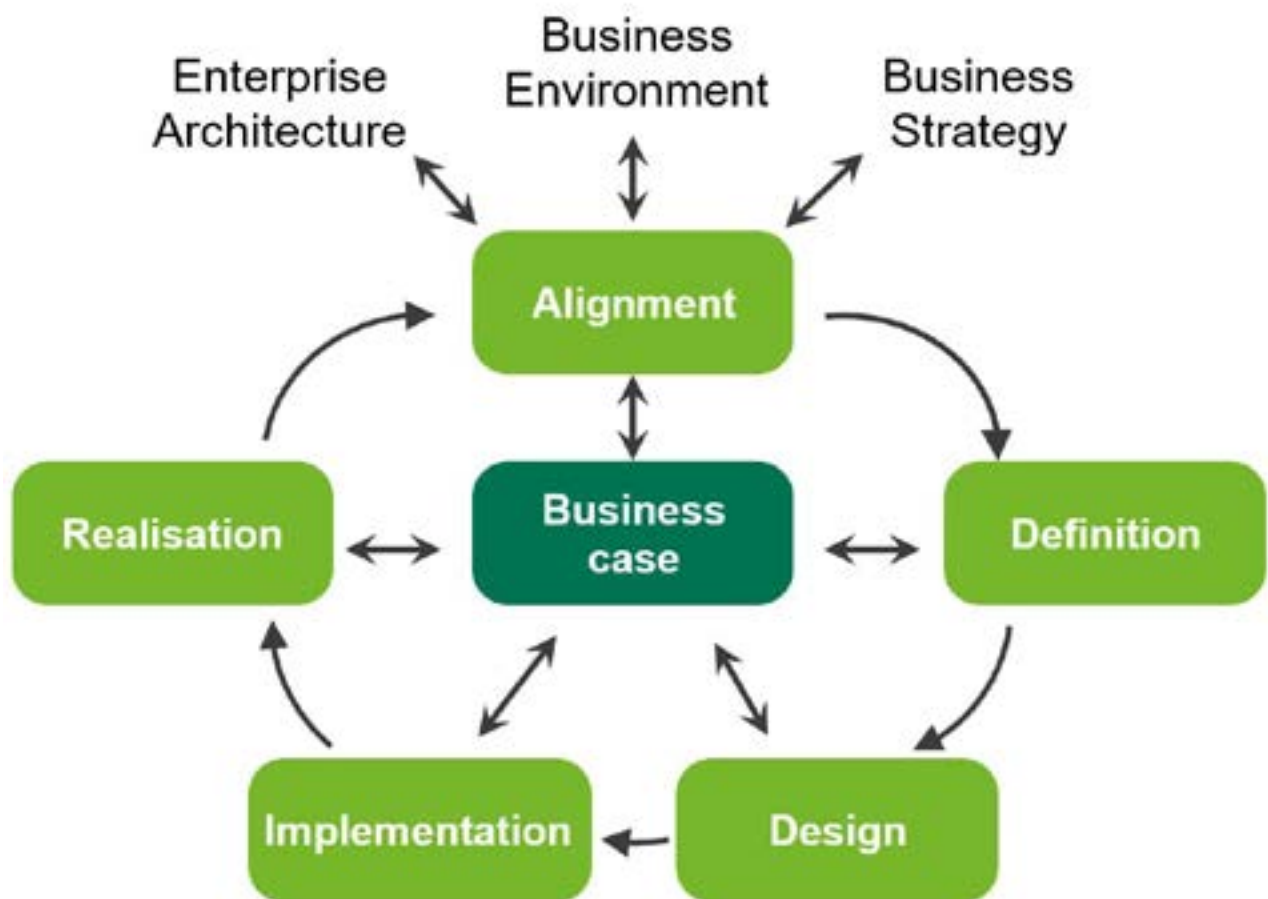
Figure 2 - Business Change Lifecycle

## 2. Business Analysis Techniques
   (K Level 4/5)

**2.1** Investigating and documenting business situations.

Select and apply the appropriate investigation techniques, document business situations and demonstrate an understanding of the relative strengths and weaknesses of the selection made.

### Indicative content

a. Investigating and documenting business situations.
b. Investigation techniques:
   i. Interviews.
   ii. Workshops.
   iii. Observation.
   iv. Document analysis.
   v. Scenario analysis.
   vi. Surveys/questionnaires.
c. Advantages and disadvantages of the techniques.
d. Applying the techniques to different business situations.
e. Applying techniques used to document existing business situations:
   i. Customer journey maps.
   ii. Rich pictures.
   iii. Mind maps.

### Guidance

All investigation techniques can be classed as either quantitative or qualitative. Candidates should recognise when a situation requires either or both types of technique and from this be able to select and be able to apply techniques most suitable to a given circumstance.

Note - the technique to document a business situation must provide a means of representing the various aspects of the existing business situation, not just one view. For example, an 'As-is' business process model may be a supplementary technique but would not provide sufficient information to document the entire business situation.

**2.2** Stakeholder analysis.

Apply an understanding of stakeholder analysis.

## Indicative content

a. Techniques used to identify stakeholders.
b. Categories of stakeholder:
   i. Business stakeholders – project sponsor, business managers, end-users, subject matter (domain) expert.
   ii. External stakeholders – customers, suppliers, regulators.
c. One technique to analyse and prioritise stakeholders.
d. Strategies for ongoing stakeholder communication and management.
e. Rationale for understanding stakeholder perspectives.
f. One technique to analyse a stakeholder perspective.
g. Approach to resolving conflicts in stakeholder perspective.
h. Use of a RACI matrix in stakeholder management.

## Guidance

A business analyst can provide value by supporting business change through effective and sustainable stakeholder collaboration, communication, and effective stakeholder relationship management.

Stakeholder engagement also comprises of other key skills that are becoming increasingly important in modern workplaces and will continue to be a part of future ways of working. In particular, collaboration, emotional intelligence and cultural awareness.

The candidate will be asked to apply their understanding of stakeholder analysis and perspectives to situations that may occur in practice.

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**2.3** Modelling business activities.

Apply an understanding of modelling business activities.

## Indicative content

a. Rationale for modelling a conceptual view of activities for a specific perspective.
b. A technique to model a conceptual view of business activities:
   i. Types of activities.
   ii. Dependencies between activities.
c. Relationship between the business perspective and the corresponding business activities.

## Guidance

A conceptual view of business activities are created with the objective to create a single consensus model which all stakeholders find agreeable. This model is a view of what the business activities *should* look like, representing neither the 'As-is' or 'To-be' views.

Candidates will be asked to apply their knowledge of Conceptual Modelling and may be asked to suggest approaches and insight to a situation that could be faced in an organisation. An example that might be used is to take the Transformation elements in a stakeholder perspective modelled in a CATWOE and 'draw' them into the Doing activities in a Business Activity Model.

**2.4** Business events.

Analyse business events.

## Indicative content

a. Types of business event:
    i. External.
    ii. Internal.
    iii. Time-based.
b. Rationale for analysing
   business events.

## Guidance

There are three types of events which should be recorded, including internal (things which happen inside the business), external (things which happen outside of the business) and time-based (events which occur with advance warning or regular frequency). Candidates will be expected to demonstrate an understanding of why this is important, distinguish between events and be able to identify them from situations that may be present in an organisation.

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**2.5** Business rules.

Explain the different types of business rules and how they should be documented and used.

## Indicative content

a. Types of business rule:
    i. Constraints on the organisation, including external legal and regulatory constraints.
    ii. Internal policies.
    iii. Internal procedures.
b. Relevance of business rules to business process and system process modelling.

## Guidance

Business rules are created when organisations decide a course of action in response to a given event and should be pre-determined and measured by the organisation. This will be 'the' way of reacting to the event mandated within the organisation. These need to be documented to ensure that their existence is commonly understood. They also need to be measured and audited to evidence that the correct rule is being applied. This frequently requires business systems to use and monitor these rules.

Candidates will be expected to be able to explain how the rules come about, the types of reasons why rules may be needed, and the ability of the business analyst role to challenge the different types of rule.

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**2.6** Gap analysis.

Explain and use gap analysis processes and techniques.

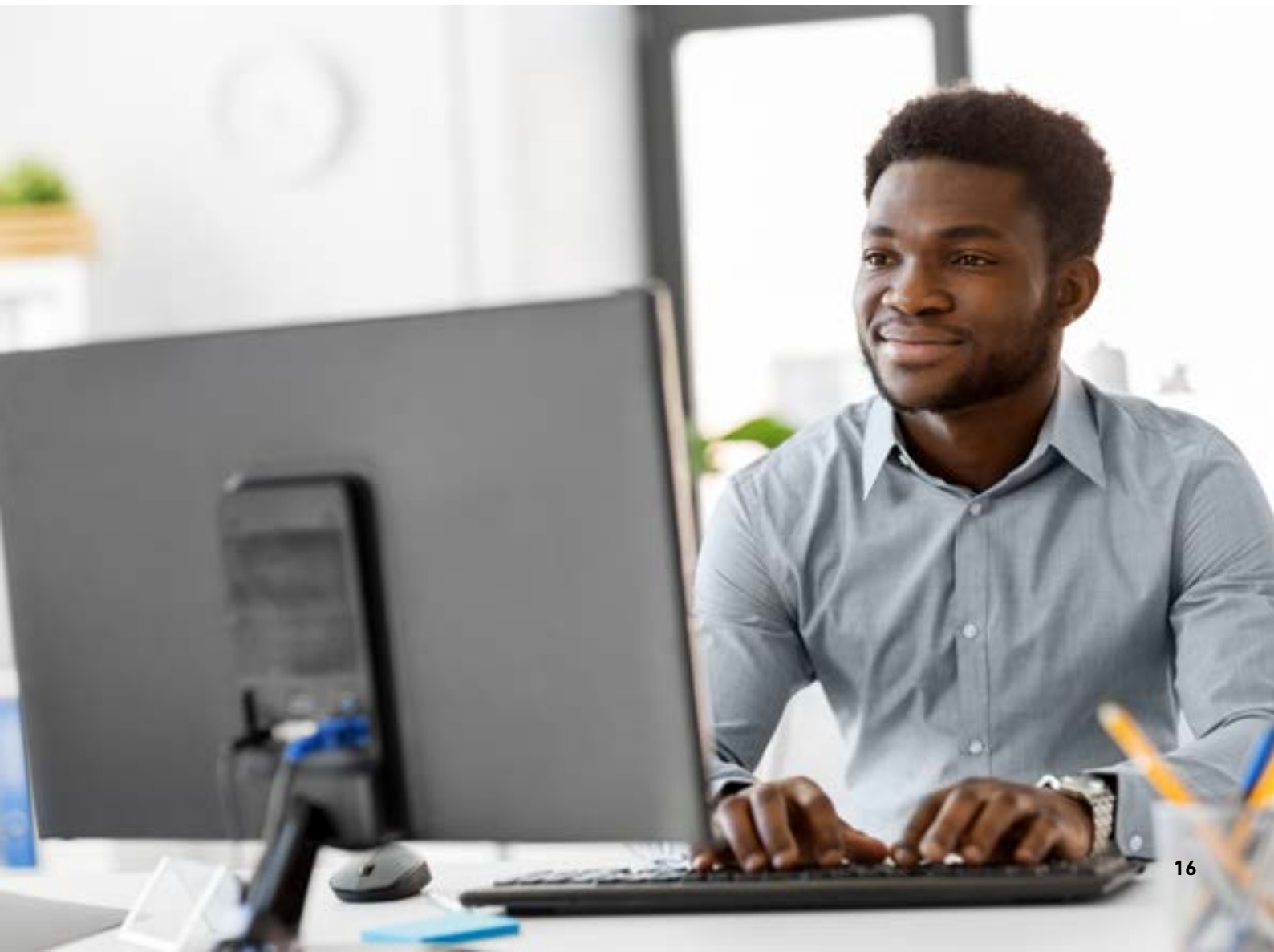## Indicative content

a. The process for gap analysis.
b. Techniques used in gap analysis:
   i. To represent the existing business situation.
   ii. To represent the desired business situation.
   iii. To analyse areas of activity.
   iv. To identify potential actions for business improvement.
c. Identifying actions and options for business change.
d. Use of Divergent and Convergent Thinking in the delivery of the 'To-be' environment.

## Guidance

Gap analysis is used to identify differences between the current and target state, by comparing relevant tools and models. Where gaps are identified, the analyst should be able to discuss options to address different types of gaps.

Candidates should be able to explain how Divergent and Convergent Thinking, among other approaches, can discover, define, develop and deliver the possible solutions to the organisation's needs in given situations.

# 3. Business Case Development
## (K Level 4/5)

Rationale for making a business case.

Explain the rationale for making a business case.

### Indicative content

a. The rationale for a business case in the context of an organisation's needs.

### Guidance

A business case is created only after investigation into potential solutions has taken place, but before any commitment is made to a solution. The purpose of a business case is to present multiple courses of action to a decision maker and make recommendations. The candidate will be asked to explain why a business case is required in response to an organisation's needs.

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Contents of a business case.

Explain the contents of a business case.

### Indicative content

a. Background description.
b. Options and their descriptions (see 3.3).
c. Costs:
    i. Areas of cost.
    ii. Tangible and intangible costs.
c. Benefits:
    i. Areas of business benefit.
    ii. Tangible and intangible benefits.
e. Cost/benefit analysis using investment appraisal techniques (see 3.5).
f. Risks:
    i. Areas of risk.
    ii. Types of risk.
    iii. Risk analysis (see 3.6).
g. Impacts (see 3.7).
h. Recommendations – the preferred option.

### Guidance

A business case should contain each of these elements, providing decision makers with enough detail to agree or disagree with the proposed recommendations. Candidates can expect to be examined on this list of contents and the type of information included in each section.

Candidates will be asked to discuss other factors that might need to be present in a business case as and when conditions demand.

**3.3** Options.

Define and interpret the options within a business case.

### Indicative content

a.  Defining a range of options.
b.  The 'do nothing' option.
c.  Perspectives to evaluate feasibility: business, technical and financial.

### Guidance

The essence of a business case are the options it provides and the imperative of the solution that needs to be selected positively and committed to by stakeholders.

The range of options presented must all be feasible within the definition for this organisation at this time. The 'do nothing' option is critical, not only because it might present the best alternative available, but because it offers a comparison of what might happen with no change (which might be catastrophic) against which the other options can be compared.

Candidates will be required to understand how this might impact the options chosen and how stakeholders might react to the options, including where the change might be enforced or regulatory in nature.

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**3.4** The financial case.

Explain the rationale for a financial case.

### Indicative content

a.  Rationale for making the financial case.

### Guidance

Every business case should have a financial case. This provides the organisation with a vital tool in assessing the best course of action. Candidates will be expected to apply this to situations an organisation may encounter and understand what choices an organisation can make in the situation.

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**3.5** Investment appraisal techniques.

Demonstrate understanding of the need for, and selection of, investment appraisal techniques in a business case.

### Indicative content

a.  Rationale for different investment appraisal techniques:
    i.   Payback period or break-even analysis.
    ii.  Discounted Cash Flow/ Net Present Value analysis.

### Guidance

In order for a financial case to be assessed in terms of its acceptability to the organisation and to compare with alternative investments that it might make, a standard mechanism should be used to consistently provide this comparison.

Candidates will be expected to apply this knowledge to situations that may occur in organisation and explain why these appraisal techniques are used and where their limitations exist.

**3.6** Risk analysis.

Apply the understanding of a risk analysis to provide insight into a business case.

### Indicative content

a. Assessing the impact of the risks.
b. Assessing the probability of the risks.
c. Risk management approaches:
   i. Risk acceptance.
   ii. Risk avoidance.
   iii. Risk mitigation.
   iv. Risk transfer.

### Guidance

Risks must be included for options presented in the business case. These risks should be analysed, and their probability, severity, counter measures and owner must be recorded as part of the risk assessment. Candidates should be able to apply this analysis to a situation and be able to suggest approaches and mechanisms to quantify and control risks.

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**3.7** Impact analysis.

Apply the understanding of an impact analysis to provide insight into a business case.

### Indicative content

a. Analysing the impacts on the organisation's culture and behaviour.

### Guidance

The business case will be looking to bring about changes in the organisation. These changes will impact the organisation (positively and negatively). The candidate will be expected to understand the difference between an impact and a risk and the part impacts play in selecting the more advantageous option for the organisation.

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**3.8** Lifecycle for the business case.

Demonstrate an understanding of the lifecycle for the business case.

### Indicative content

a. Rationale for business case reviews/gateways.

### Guidance

A business case is a living document, updated at many points in the project lifecycle. At specific points on any project lifecycle there is a need for a formal review of the business case. This will vary dependent upon the method of change proposed.

Candidates will be expected to understand why these updates take place, when they might be triggered and the key stages of a project that may trigger the need for a formal review of the business case.

# 4. Requirements Definition (K Level 4/5)

**4.1** Requirements engineering.

Explain the Requirements Engineering Framework and apply the structure to specific given situations.

## Indicative content

a. Rationale for requirements engineering.
b. Definition of a requirement.
c. Hierarchy of requirements.
d. Elements of the requirements engineering approach.
e. Requirements planning and estimating.

## Guidance

The Requirements Engineering Framework, as shown, demonstrates the relationship between the typical stages of the requirements engineering process. The non-linear nature of this framework should be noted, allowing for flexibility in the order of completion of these stages, and repetition as required. Note that stakeholder engagement and consultation is necessary throughout this framework.

Candidates are expected to be able to discuss the framework itself and how it can be applied to situations in organisations to effect change.
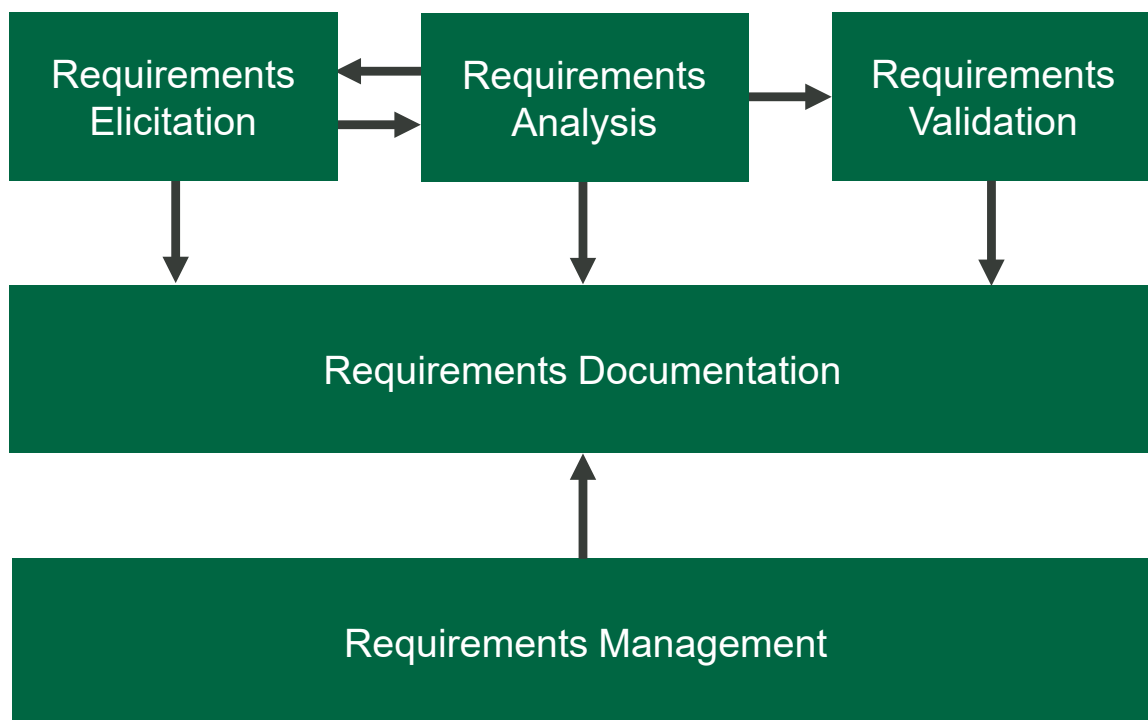


Figure 3 - Requirements Engineering Framework

**4.2** Requirements elicitation.

Apply and demonstrate appropriate selection of requirements elicitation techniques to ensure that requirements are given the best chance of being correct and complete.

## Indicative content

a. Techniques to elicit requirements (see list of techniques in 2.1).
b. Applying the techniques when eliciting requirements in both linear and iterative approaches.
c. Knowledge types:
   i. Tacit.
   ii. Non-tacit/explicit.
   iii. Relevance and selection of techniques when eliciting different knowledge types.

## Guidance

Candidates should understand the benefits and drawbacks of the techniques listed in section 2.1 and be able to apply appropriately in a range of circumstances. Consider how these techniques have evolved within different organisational contexts to take account of online working and collaboration.

The ability to categorise and elicit both tacit and explicit knowledge is integral to the requirements engineering process. Elicitation is concerned with purposefully extracting requirements from stakeholders, a process which requires different skills and techniques to simply gathering knowledge.

**4.3** Requirements analysis.

Prepare requirements analysis.
Demonstrate an understanding and application of requirements analysis to refine a set of requirements.

## Indicative content

a. Separation between requirements analysis and elicitation.
b. Requirements analysis tasks:
   i. Checking congruence with business objectives and the business case.
   ii. Checking feasibility.
   iii. Structuring the requirements.
   iv. Prioritisation – the structure and application of a technique to allocate a priority to each requirement. The link between the prioritisation technique and the lifecycle for delivery of the solution.
   v. Packaging requirements for delivery.
   vi. Use of scenarios and prototyping in requirements analysis.
   vii. Dealing with overlapping, duplicate and conflicting requirements.
c. Quality characteristics of the requirements:
   i. Testable.
   ii. Unambiguous.
   iii. Relevant.
   iv. Clear.
   v. Complete.
   vi. Consistent.
   vii. Traceable.
d. User analysis and profiling.

## Guidance

Requirements do not appear to the business analyst fully formed and complete. There is a need to take the first draft version of a requirement and apply filters and assessment criteria such as a 'definition of ready' to them to make them fit for purpose. The requirements are not all equally important and a mechanism is required to prioritise them into a sequence (involving value and importance to different stakeholder groups).

Candidates will be expected to understand this process is different and distinct from elicitation and the importance of making sure that all requirements are going to provide what is needed to different sub-sets of stakeholders, and can be assessed as having done so.

Explain the requirements validation process.

| **Indicative content** | **Guidance** |

## Indicative content

a. Rationale for requirements validation.
b. Requirements validation process.
c. Stakeholder concerns and responsibilities in requirements validation.

## Guidance

Having gone through the requirements elicited and correctly analysed them, there is a need to ensure that the requirements represent the full set of needs of the customer groups. The validation process will differ significantly depending upon the lifecycle being used, but the essence of the process is to ensure that having delivered what is stated as the requirements, the full solution required will have been delivered.

Candidates will be expected to be able to describe the process, whether taking a Requirements Document through a formal validation process, or a single requirement through validation to be used in an iterative lifecycle; and be able to explain why they need to achieve this.

## 5. Requirements Management and Documentation (K Level 4/5)

**5.1** Requirements management.

Apply the principles of requirements management.

### Indicative content

a. Rationale for requirements management.
b. Elements of requirements management:
    i. Identifying requirements.
    ii. Source of the requirement.
    iii. Owner of the requirement.
    iv. Cross-references for the requirement.
    v. Change control.
    vi. Version control.
    vii. Storage of the documented requirements.
c. Traceability:
    i. Vertical traceability.
    ii. Horizontal traceability
d. Ownership.

### Guidance

Traceability is the means of being able to track the development of a requirement – either forwards or backwards throughout the development cycle (why does it exist or what became of it?), or vertically, to confirm alignment with overall business strategy.

Candidates should be able to define both forms of traceability including when and why they are required.

**5.2** Change control.

Explain the change control process.

### Indicative content

a. Change control process.
b. Sources of change.

### 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 justified.

Candidates should be able to explain how the changes come about, where they can originate (e.g. from external environment, stakeholders, missed context), why this is critical and some of the issues that occur when this is not done well.

**5.3** Version control.

Explain the version control process.

### Indicative content

a. Configuration management process.
b. Levels of configuration item – individual requirement or document.
c. Version numbering.

### Guidance

Version control ensures that any movement from draft to baselined requirements, and any movement within those, is recorded through the allocation of a unique identifier and the allocation/update of a version number. This ensures that any movement in requirements is clearly recorded and version numbers can be used for comparison and to ensure all parties are working with the correct version.

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**5.4** Tools in requirements management.

Compare tools in requirements management.

### Indicative content

a. Functionality provided by tools:
    i. Storage of documentation and models.
    ii. Linkage and cross-referencing.
    iii. Change and version control.
    iv. Access restrictions.

### Guidance

Candidates should be able to explain and justify each element of requirements management as listed, and the relationship between these elements. For example, the relationship between cross-referencing and change control, and where any change made to a single requirement may impact on other requirements.

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**5.5** Types of requirements.

Categorise different types of requirements.

### Indicative content

a. Business requirements:
    i. General business requirements.
    ii. Technical requirements.
b. Solution requirements:
    i. Functional requirements.
    ii. Non-functional requirements.

### Guidance

Requirements are categorised depending on whether they are related to a business objective, or the solution/product. Sub-categories can then be established. This categorisation is useful when prioritising requirements, selecting a documentation approach and ensuring alignment with business strategy, etc.

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**5.6** Legal issues and business analysis.

Explain the legal issues relevant to business analysis and how they should guide your choices.

## Indicative content

a. Data protection: rationale, principles and impact on requirements.
b. Disability access: rationale, principles and impact on requirements.

## Guidance

Candidates will need to demonstrate that they are aware that a business analyst has an obligation to undertake their role cognisant of the law. They will be required to identify circumstances and raise them with stakeholders when, inadvertently, requirements have been specified that contravene laws and regulations in the organisation in which they are working.

Note - this section is not concerned with the detail of the relevant laws but the underlying rationale for each area and the relevance to the business analyst.

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**5.7** Documenting requirements.

Select, apply and justify the documentation styles and approaches within requirements engineering.

## Indicative content

a. Requirements documentation styles both text-based and diagrammatic:
   i. Use case diagram (see 5.8).
   ii. User stories: purpose, format and content.
   iii. Data model (see 5.8).
b. Requirements Catalogue - purpose of the elements described for each requirement:
   i. Identifier.
   ii. Name.
   iii. Description.
   iv. Business area.
   v. Type of requirement.
   vi. Author.
   vii. Source.
   viii. Owner.
   ix. Priority.
   x. Rationale/justification.
   xi. Cross-referenced requirements.
   xii. Cross-referenced documents.
   xiii. Acceptance criteria.
   xiv. Status/resolution.
   xv. Version number and date.

## Guidance

Documentation should be used throughout requirements engineering. This can take many forms, considering the project approach and type of requirement. Documentation can be revisited/referred to at each stage of the process, as illustrated by the requirements engineering framework. Robust documentation will capture the development of requirements from elicitation to implementation and ongoing management.

Documentation will vary depending upon the method being used to deliver the requirements and the solution as a whole. Candidates will be expected to demonstrate approaches that are both adherent to the principles of 'quality documentation' and demonstrate flexibility of adapting the outcome to the needs of the organisational situation.

**5.8** Requirements modelling.

Describe, select and justify the use of requirements modelling techniques for specific situations.

## Indicative content

a. The rationale for modelling requirements: eliciting, analysing and validating requirements.
b. Conceptual models.
c. Purpose of use case models and data models.
d. Use case diagrams and descriptions.
    I. The notation and structure including:
        i. The actors.
        ii. The use cases within the system scope.
        iii. The associations between the actors and the use cases.
        iv. The boundary of the system.
e. Modelling the system data requirements.
    I. The notation and structure of a technique to model the system data requirements, including:
        i. The groupings of data.
        ii. The degree of the relationships between data groupings.
        iii. The types of optionality within relationships between data groupings.
        iv. The application of a CRUD matrix.
f. Business rules and the data model.
g. Prototyping as a modelling tool and for requirements elicitation and elaboration.

## Guidance

Being able to visualise the solution using a model can help both the analyst and stakeholders to confirm the functional requirements are as intended, and to identify any errors.

Modelling is used to provide a visual representation of the intended solution. Candidates should understand that models are used to provide clarity and ensure consistency of requirements, allowing the concept to be easily understood by others.

Candidates will be asked to explain the models, the approaches that require and utilise them, and practical choices and application of models in situations that may occur in organisations.

# 6. Practitioner Specialism (K Level 2/3)

While this element of the exam is highlighted as a separate section, and is assessed as such, it is possible that the questions asked to examine this section could be interspersed among other questions and not asked as a specific group of questions at the end of the exam.

**6.1** Relevance to the business analyst role.

Explain the relevance of the module to the role of the business analyst.

### Indicative content

a. Use of the approach in business analysis work.
b. Use of the techniques in business analysis work.

### Guidance

Candidates will be expected to demonstrate awareness of how the specific module that they studied supports the role of the business analyst and why the techniques, methods and models they studied bring greater clarity.

**6.2** Relevance of the module to an organisation.

Explain the relevance of the module to an organisation.

### Indicative content

a. Relevance to organisational context of the approach.
b. Rationale for the specific module and how it is used in organisations.

### Guidance

Candidates will be expected to demonstrate awareness of how the specific module that they studied is relevant to an organisational context.

**6.3** Description of the module.

Describe the contents of the module.

### Indicative content

a. The approach adopted in the module:
    i. Rationale for the approach.
    ii. Overview of the approach.
b. The techniques covered by the module:
    i. Rationale for using the techniques.
    ii. Relevance of the techniques.
    iii. Application of the techniques.

### Guidance

Candidates will be expected to demonstrate knowledge of the content of the module they studied and an understanding of how the techniques, methods and models they studied can be used when conducting business analysis.

# Examination Format

| | |
|---|---|
| **Type** | Oral. |
| **Duration** | 50 minutes. Candidates are able to request additional time if they have a disability that would impact them during an oral examination such as a speech impediment. |
| **Pre-Requisite for course and/or exam** | Candidates must have passed written examinations in the two core modules, one knowledge-based specialist module and one practitioner module. |
| **Closed Book** | Yes. Reading material is not to be used during the oral interview. |
| **Passmark** | Pass or fail. |
| **Delivery** | Interview by two oral examiners. |

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.

# Terminology Used

The terminology used in the oral examination will conform to that adopted in BCS publications on business analysis and related disciplines such as project management (see reading list at the end of this syllabus).

# Recommended Reading

It is the responsibility of the oral examination candidate to ensure that they possess sufficient knowledge and understanding of the topic areas defined in sections 1-6 of the syllabus above. The reading list below is provided to support candidates in their study and revision for the oral examination.

| | |
|---|---|
| **Title:** | Business Analysis (4th Edition) |
| **Author:** | Debra Paul and James Cadle |
| **Publisher:** | BCS |
| **Publication Date:** | July 2020 |
| **ISBN:** | 978-1780175102 |

| | |
|---|---|
| **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:** | 978-1780175690 |

| | |
|---|---|
| **Title:** | Benefits Management: How to increase the business value of your IT projects |
| **Author:** | John Ward and Elizabeth Daniel |
| **Publisher:** | John Wiley and Sons |
| **Publication Date:** | September 2012 |
| **ISBN:** | 978-111999326 |

| | |
|---|---|
| **Title:** | Developing Information Systems |
| **Author:** | James Cadle |
| **Publisher:** | BCS |
| **Publication Date:** | August 2014 |
| **ISBN:** | 978-1780172453 |

| | |
|---|---|
| **Title:** | UML 2 and the Unified Process (2nd Edition) |
| **Author:** | Jim Arlow and Ila Neustadt |
| **Publisher:** | Addison-Wesley |
| **Publication Date:** | June 2005 |
| **ISBN:** | 978-0321321275 |

# 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 3.3**<br>**March 2022** | Learning outcomes updated. |
| **Version 3.2**<br>**March 2022** | Introduction updated.<br>'Objectives of the Oral Examination' section updated. |
| **Version 3.1**<br>**October 2021** | Introductory sections updated.<br>SFIA mapping added.<br>Guidance notes added.<br>Learning outcomes updated: 1.3, 1.7, 1.8, 2.1, 2.2, 2.6, 3.1, 3.2, 3.5, 3.6, 3.9 removed, 4.2, 4.3, 5.1, 5.2, 5.5, 5.7, 5.8, 6.2<br>Figures 1, 2, 3 added.<br>Length of examination updated.<br>Recommended reading updated. |
| **Version 3.0**<br>**January 2019** | Knowledge-based specialism removed as a knowledge area.<br>Generic items within this knowledge area moved to earlier in the syllabus.<br>Sectors of the economy removed. |
| **Version 2.4**<br>**December 2016** | Strapline regarding regulated statement has been added. |
| **Version 2.3**<br>**November 2014** | Updated the reading list. |
| **Version 2.3**<br>**June 2013** | Renamed 'IT Enabled Business Change' to 'Business Change'.<br>Removed time limit for Organisational Context to be accepted as the knowledge-based specialism.<br>Updated the details of the Michael Blackstaff book Finance for IT Decision Makers (3rd Edition). |
| **Version 2.1**<br>**June 2012** | Added 'International' to the Qualification Title. |
| **Version 2.0**<br>**March 2011** | Removed references to ISEB and replaced logos with BCS.<br>Changed Business Analysis Essentials to Business Analysis Practice.<br>Renamed Section 1. Added new Sections: 1.3; 1.5; 1.6; 3.8; 6.2;6.3.<br>Extended Sections: 1.7; 2.1; 2.5; 4.1;4.3; 4.4; 5.1; 5.6;5.7; 6.5. |
| **Version 1.2**<br>**July 2011** | Document updated to reflect the BSD refresh. |

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