

# **BCS Practitioner Certificate in Modelling Business Processes Syllabus**

Version 5.0 September 2018

This professional certification is not regulated by the following United Kingdom Regulators - Ofqual, Qualification in Wales, CCEA or SQA

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# **Change History**

This log provides a single point of reference, where a summary of any changes are recorded, to include the date of the amendment and a summary of the changes made.

Version Number	Summary of Changes Made
Version V5.0 September 2018	Amended to closed book.  Pass mark details amended post Angoff review.  LO 4.2 updated to reflect the use of structured English. Required and Recommended reading list confirmed.  Additional guidance added.
Version 4.0 July 2017	Syllabus finalised. Duplicated information removed. Exam format table moved to front. SFIA information moved to front: K-Level adjusted. Information pertinent to ATOs grouped to one section. Examination methodology changed to MCQ Syllabus review and amendments. 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. Strapline regarding regulated statement has been added All syllabus sections converted to learning outcome. Refresh on all syllabus content.
Version 3.3 March 2015	Updated language requirements for extra time and use of dictionaries.  Standardised the trainer requirements.
Version 3.2 May 2014	Added updated syllabus sections and related comment. Reading list updated.
Version 3.1 August 2012	Added details of extra time for foreign language candidates.
Version 3.0 August 2011	Updated BCS logos and strapline. Standardised headings. Added table of contents, levels of knowledge, levels of skill and responsibility, format of examination, change history and definition terminology. Technical content: Removed Section 2.5 Importance of metrics and measurements.

### Introduction

This certificate covers the range of concepts, approaches and techniques that are applicable to the Practitioner Certificate in Modelling Business Processes. It is relevant to anyone requiring an understanding of Modelling Business Processes and focuses on the investigation, modelling, analysis and improvement of business processes.

## Levels of Knowledge / SFIA Levels

This syllabus will provide candidates with the levels of difficulty highlighted within the following table, enabling them to develop the skills to operate at the highlighted level of responsibility (as defined within the SFIA framework) within their workplace. The levels of knowledge and SFIA levels are further explained on the website <a href="https://www.bcs.org/levels">www.bcs.org/levels</a>.

Level	Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
7		Set strategy, inspire and mobilise
6	Evaluate	Initiate and influence
5	Synthesise	Ensure and advise
4	Analyse	Enable
3	Apply	Apply
2	Understand	Assist
1	Remember	Follow

# **Learning Outcomes**

Candidates should be able to demonstrate knowledge, understanding and application of Modelling Business Processes principles and techniques in the following areas:

- 1. The role of business process modelling in describing how an organisation carries out its internal processes; the hierarchy of process models and techniques to describe them; and why this is a key skill of the business analyst in supporting change.
- 2. Modelling core business processes at an organisational level.
- 3. Modelling business processes at the process level, showing all the elements involved from triggering events to process end-points.
- **4.** Documenting and analysing tasks.
- **5.** The use of gap analysis in improving business processes.

#### **Course Format and Duration**

Candidates can choose to study for this certificate from one of two ways: by either attending a training course provided by a BCS Accredited Training Organisation, or by self-study.

BCS recommends that for full coverage of the syllabus to be achieved, training courses leading to the certificate should normally run for a minimum of 12 hours over two days.

## **Eligibility for the Examination**

There are no pre-requisites for entry to the examination, although accredited training is strongly recommended.

## **Examination Format and Duration**

Туре	Multiple choice*.
Duration	60 minutes*.
Supervised	Yes.
Open Book	No.
Pass Mark	25/40
Calculators	Calculators cannot be used during this examination.
Delivery	Digital or paper based, depending on exam provider.

<sup>\*</sup>If you are sitting an exam through a BCS Accredited Training Provider (ATP), please confirm with them the format of their exam and the amount of questions, which may differ.

## **Additional Time**

#### For Candidates Requiring Reasonable Adjustments Due to a Disability

Please refer to the reasonable adjustments policy for 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.

## **Guidelines for Accredited Training Organisations**

Each major subject heading in this syllabus is assigned an allocated percentage of study time. The purpose of this is:

- 1) Guidance on the proportion of time allocated to each section of an accredited course.
- 2) Guidance on the proportion of questions in the exam.

Courses do not have to follow the same order as the syllabus and additional exercises may be included, if they add value to the training course.

# **Excerpts from BCS Books**

Accredited Training Organisations may include excerpts from BCS books in course materials. To use excerpts from the books, a license from BCS is required, which can be obtained by contacting the Head of Publishing at BCS.

## **Syllabus**

## **Learning Objectives**

1. The Context for Business Processing Modelling 15%

Candidates will be able to:

- **1.1** Demonstrate an understanding of the purpose and benefits of business process modelling.
- **1.2** Identify the three levels of the business process hierarchy; organisation, process and task level.
- **1.3** Explain the importance of the process view versus the functional view of an organisation.
- **1.4** Describe the use of the POPIT model in assessing the impact of a new process design.
- **1.5** Discuss the use of pilot, phased, direct changeover and parallel running to implement business change.

#### 2. The Organisational Context for Business Processes 20%

Candidates will be able to:

- **2.1** Understand the construction of an organisational level model of business process for a given business scenario.
- 2.2 Understand how to construct an organisational model for a given scenario (Paul et al, Business Analysis, 3<sup>rd</sup> Edition).
- 2.3 Apply knowledge to distinguish between the external and internal elements of an organisational model.
- **2.4** Explain how the processes on the organisational model support the delivery of the value proposition.

#### 3. Modelling the Business Processes 30%

Candidates will be able to:

- **3.1** Understand the construction of a business process model for a given business scenario, using the following elements:
  - 3.1.1 Actors.
  - 3.1.2 Swim lanes.
  - 3.1.3 Tasks.
  - 3.1.4 Decision points with guard conditions.
  - 3.1.5 Start and end points.
  - 3.1.6 Process flows.
  - 3.1.7 Forks and joins.
- **3.2** Explain why using a standard notation set is important.
- **3.3** Apply knowledge to distinguish between the terms process, task and step; describe how they relate to each other.
- 3.4 Demonstrate that a task typically involves one person (actor) at one place at one time (OPOPOT), and that it is represented as a single 'box' on a process model.
- **3.5** Based on a given business scenario, identify external, internal and time-based business events.
- **3.6** Explain the difference between internal performance measures and customer expectations of performance.

#### 4. Documenting Tasks 15%

Candidates will be able to:

- **4.1** Understand how to construct a task description for a given business scenario, which includes the following elements:
  - 4.1.1 The name of the task.
  - 4.1.2 The actor (or role) carrying out the task.
  - 4.1.3 The trigger or business event that initiates the task.
  - 4.1.4 Any inputs to the task.
  - 4.1.5 The outputs expected from the task.
  - 4.1.6 The costs associated with the task.
  - 4.1.7 The measures that are applicable to the task.
  - 4.1.8 The standards that constrain the task.
  - 4.1.9 A detailed breakdown of the steps within the task.
  - 4.1.10 The business rules that are to be followed in performing the task.
- **4.2** Demonstrate an ability to document the steps and business rules within a task, using UML activity diagram notation, or structured English.

#### 5. Improving Business Processes 20%

Candidates will be able to:

- **5.1** Apply the following approaches to improving business processes: task automation; removal of gaps and disconnects; process re-engineering.
- **5.2** Show understanding of the need to challenge business rules and assumptions when improving business processes.
- 5.3 Identify the areas of a business process that may contribute to unsatisfactory performance from a given scenario.
- **5.4** Explain the use of business scenarios in identifying combinations of conditions that the improved business process will need to handle.
- 5.5 Conduct a gap analysis on a given 'to be' business process model, in order to identify the functional requirements for the IT system support for that business process.

# **Additional Guidance**

These guidance notes have been created to clarify the approach taken in the creation of the syllabus and associated centralised examination for the BCS Practitioner Level Certificate in Business Process Modelling.

Syllabus Area	Notes
2 - General	The term <i>organisational model</i> is used in the syllabus to refer to the model developed by Paul Harmon ( <i>Business Process Change</i> , Morgan Kaufman) and used in the BCS book <i>Business Analysis</i> , Paul et al. It has five elements; suppliers, customers, environment, competition and, in the centre, processes.
2.4	The organisational model includes, at its centre, the core business processes. A <b>process map</b> is appropriate here, showing the high-level set of activities carried out in order to deliver benefit or value to the customer.  A business process map might be structured around Michael Porter's <b>value chain</b> . Considering the value chain is another way of defining appropriate high-level processes for the organisational model.
3.1	The Unified Modeling Language (UML) notation for activity diagrams forms the basis of this learning objective. Specifically; 3.1.4 to 3.1.7. 3.1.2: Time might be represented as a swim lane, to show the elapsed time of a task, set of tasks or indeed the complete process.
3.6	Customer expectations of performance are external measures, usually associated with a complete process. For example, a car manufacturer may have a process measure for 'Make Car'; perhaps 18 hours per car. However, this measure is irrelevant or inaccessible to the actual customer of the car. It is an internal performance measure.  The customer's expectation of performance would be measured in days, from placing the order to taking delivery of the new car.  The term 'customer' can cover several external stakeholders who have expectations about the process.
4.2	The following Structured English constructs will need to be interpreted. Sequence: DOENDO Selection: IFENDIF, IFTHENELSEENDIF Iteration: DOWHILEENDWHILE, DOUNTILENDUNTIL
5.3 and 5.4	Scenarios are defined in in the BCS book <i>Business Analysis</i> , Paul et al, third edition pages 87 – 90. "Scenarios are useful when analysing or <i>redesigning</i> business processes".
5.5	This learning objective considers two issues:  Moving from the business process model to a specification of the functional requirements for an IT system. In effect, showing which elements of the 'to-be' process model will appear on a use case diagram. This links to the Requirements Engineering syllabus. The term functional requirement is used here exactly as it is in Requirements Engineering syllabus. Non-functional, technical and general requirements are not considered.  Many process improvements are implemented using Commercial Off The Shelf (COTS) software packages. The 'gap' referred to in this learning objective refers to the gap between the proposed process (to-be) and the one that can actually be delivered by the COTS solution.

# **Required Reading List**

**Title** Business Analysis (3<sup>rd</sup> edition) Author Debra Paul, James Cadle and Donald Yeates (editors) **Publisher BCS Publication Date September 2014** 

ISBN: 978-1-78017-278-1

# **Recommended Reading List**

**Title** Business Analysis Techniques (2<sup>nd</sup> edition) Author Debra Paul, James Cadle and Paul Turner **Publisher BCS** Publication Date September 2014 **ISBN** 978-1-780172-73-6