Understanding the Problem and Implementing the Solution V1.0

Syllabus

BCS Foundation Award

bcs
The Chartered Institute for IT

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

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
1.0	Document creation.
1.1	Updated information on module credits.

CONTENTS

Introduction

The BCS Foundation Award in Understanding the Problem and Implementing the Solution is designed for anyone wishing to gain an understanding of how an organisation works to identify and understand a business problem, and how it considers, selects, implements, and tests a solution.

This award focusses on the techniques required to solve a problem including the gathering of information, the application of business analysis, the identification of the root cause, and the processes through which a suitable solution can be identified, proposed and implemented. Candidates will also be encouraged to consider the use of project planning to deliver the solution and to manage stakeholders.

Qualification Suitability and Overview

There are no specific entry requirements for this award. However, some professional experience in a business or IT environment may be advantageous.

The BCS Foundation Award in Understanding the Problem and Implementing the Solution has been designed for individuals who may be required to support the implementation of a new solution at an organisational level. This Foundation Award is ideal for candidates who wish to gain an insight into the ways of working to make implementation successful.

This award has been created alongside a selection of other awards which offer candidates a clear pathway of progression into other disciplines of IT. This makes it ideally suited for those looking for a change in career, an upskilling workforce, sustainable employers, and individuals with a background in science, engineering, knowledge engineering, finance, education, or IT services.

This list is not exhaustive, and many other roles may benefit.

This award counts towards achieving your Foundation Certificate in AI and/or your Foundation Diploma in AI.

- To receive the Foundation Certificate in AI, you need to achieve four awards - one award from each of the categories listed here (https://www.bcs.org/media/qd5dotas/ai-pathway-24.png)
- To receive the Foundation Diploma in AI, you need to achieve eight awards in total - one or more award from each of the categories listed here (https://www.bcs.org/media/qd5dotas/ai-pathway-24.png)

Once you have achieved this, please contact your training provider or, if you are a self-study candidate, BCS. Your certificate will then be processed.

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	Guided Learning Hours	Independent Learning	Assessment Qualification Time
40 hours	16 hours	23.5 hours	0.5 hours

*Examples of Independent Learning include reading of articles or books, watching videos, attendance of other types of training or work shadowing.

Trainer Criteria

It is recommended that to effectively deliver this award, trainers should possess:

- BCS Foundation Certificate in a relevant subject.
- A minimum of 2 years' training experience or a recognised training qualification.

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**

SFIA Plus

This syllabus has been linked to the SFIA knowledge skills and behaviours required of an individual working at level 3.

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.

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.

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

Learning Outcomes

Upon completion of the award, candidates will be able to demonstrate:

1. An understanding of how to define the problem
2. An understanding of how to find solutions
3. An understanding of how to Implement the solution
4. An understanding of the need for testing, continual improvement, and feedback

Syllabus

1. Defining the problem (20%) (K1/2)

Candidates will be able to:

1.1 Illustrate their understanding of the organisation in its current position.

Indicative content

a. Identify the stakeholders
b. Conducting a baseline assessment (Capability, Internal, External)
c. Conducing a gap analysis

Guidance

Explore the need to understand the organisation to be able to properly define the problem – to understand mission, objectives etc. Complete a baseline assessment to identify starting point/current reality.

Syllabus

1. Defining the problem (20%) (K1/2)

Candidates will be able to:

1.2 Explain the value proposition.

Indicative content	Guidance
a. Agreed deliverables b. Demonstration of value c. Engage customers and stakeholders	Candidates should be encouraged to consider how to communicate the value of their solution to the organisation, including the benefits and how it will solve the problem.

Candidates will be able to:

1.3 Describe the process for gathering research.

Indicative content	Guidance
a. Data gathering b. Process mapping c. Value stream mapping d. Questionnaires e. Focus groups.	Consider methods used to gather research, and the purpose and suitability of each.

Candidates will be able to:

1.4 Explain the concept of problem solving and recognise problem solving styles including proactive, reactive and forensics.

Indicative content

a. Miro Ishikawa Fishbone
b. Brainstorming
c. Mind mapping
d. Pareto analysis
e. Kepner Tregoe technique
f. Occam's razor
g. Hypothesis testing
h. Value engineering
i. 5 whys

Guidance

Explore the different styles of problem solving (and the reasons for the differences in approach – link to understanding organisation) and consider various tools which can be used, as listed. Consider similarities and differences in techniques.

Syllabus

2. Finding the solution (30%) (K1/2)

Candidates will be able to:

2.1 Explain problem solving steps and the approaches to the solution.

Indicative content	Guidance
a. State the problem b. Stakeholder analysis c. List solutions d. Evaluate options e. Stop it, mop it	Candidates should explore the different stages required in any approach to problem solving and consider techniques to manage these steps. Such as, establishing the power and interest of various stakeholders.

Candidates will be able to:

2.2 Describe the use of simulation modelling in finding the solution.

Indicative content	Guidance
a. Prototype b. Differing conditions c. Predicting results	Introduce the concept of simulation modelling – creating a version (sample/prototype) of the solution and testing it under various conditions to ensure it performs as expected. Making any adjustments required and retesting.

Candidates will be able to:

2.3 Explain the value in committing to a solution.

Indicative content

a. Commitment
b. Clarity
c. Direction
d. Reduced inefficiencies
e. Cost savings
f. Purpose
g. Clear lines of accountability

Guidance

Candidates should be encouraged to explore the value (to the individual, project team, organisation) of committing to the agreed solution. For example, being able to provide clear objectives and deadlines.

Syllabus

3. Implementing the solution (30%) (K1/2)

Candidates will be able to:

3.1 Explain the importance of a project plan when implementing a solution.

Indicative content	Guidance
a. Authorisation b. All options c. Defines success criteria d. Budget e. Timings	Explore the use and format of a project plan, including the detail it must contain and the importance of continuous updates.

Candidates will be able to:

3.2 Describe Stakeholder management.

Indicative content	Guidance
a. Communication strategy b. Stakeholder analysis	Introduce the many stakeholder roles to be considered, and their differing requirements in terms of communication, input, interest, influence etc.

Candidates will be able to:

3.3 Identify common Agile and DevOps techniques that can be used to implement the solution.

Indicative content

a. CALMS model
b. Agile mindset
c. Servant leadership
d. Continuous integration

Guidance

Consider the use of the techniques shown and understand the key characteristics. For example, when would one apply the principles of servant leadership (empathy, awareness, persuasion etc)?

Syllabus

4. Testing, Continual Improvement and Feedback (20%) (K1/2)

Candidates will be able to:

4.1 Explain the importance of testing and continual evolution.

Indicative content	Guidance
a. Continual improvement b. Testing methods c. Monitoring d. Questionnaires	Consider the impact of not testing the solution – candidates should explore the methods of testing as previously discussed and the reasons for doing so, such as performance efficiency, cost management etc.

Candidates will be able to:

4.2 Outline the process for evaluating the solution.

Indicative content	Guidance
a. Pre and post implementation	Further explore the need and means of evaluating the solution, both before and after implementation, such as – performance versus expectations, security, user experience.

Candidates will be able to:

4.3 Outline the process for monitoring the solution.

Indicative content	Guidance
a. Kanban b. Scrum	Explore the examples given as means of monitoring the solution on a transparent and ongoing basis.

Candidates will be able to:

4.4 Give examples of measuring success.

Indicative content	Guidance
a. Profit Time	Candidates should be encouraged to consider what makes a solution successful, and how these indicators can/ should be measured and by whom. For example, was the solution delivered on time, are stakeholders satisfied with the level of communication throughout.

Examination Format

This award is assessed through completion of an invigilated online exam which candidates will only be able to access at the date and time they are registered to attend.

Type	16 Multiple Choice questions, 2 Scenario Based Questions
Duration	30 minutes
Supervised	Yes
Open Book	No (no materials can be taken into the examination room)
Passmark	13/20 (65%)
Delivery	Digital format only.

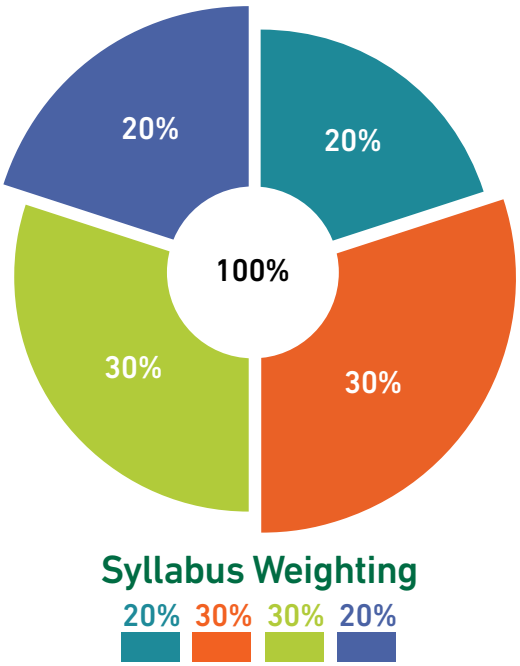
Adjustments and/or additional time can be requested in line with the BCS reasonable adjustments policy for candidates with a disability, or other special considerations including English as a second language.

Question Weighting

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

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

Syllabus Area	Question type	
1. Defining the problem	Multiple Choice	**20%**
2. Finding the solution	Scenario Based Multiple Choice	**30%**
3. Implementing the solution	Scenario Based Multiple Choice	**30%**
4. Testing, Continual Improvement and Feedback	Multiple Choice	**20%**



Recommended Reading

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

Title:	Business Analysis, 4th Edition
Author:	Debra Paul, James Cadle, Malcolm Eva, Craig Rollason and Jonathan Hunsley
Publisher:	BCS, The Chartered Institute for IT
Publication Date:	July 2020
ISBN:	9781780175102

Using BCS Books

Accredited Training Organisations may include excerpts from BCS books in the course materials. If you wish to use excerpts from the books you will need a license from BCS. To request a license, please contact the Head of Publishing at BCS outlining the material you wish to copy and the use to which it will be put.

CONTACT

For any queries relating to this document or the delivery of this award, please contact;

T: 01793 417445

E: bcssales@bcs.uk

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

For further information please contact:

BCS
The Chartered Institute for IT
3 Newbridge Square
Swindon
SN1 1BY

T +44 (0)1793 417 445

www.bcs.org

© 2025 Reserved. BCS, The Chartered Institute for IT

All rights reserved. No part of this material protected by this copyright may be reproduced or utilised in any form, or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without prior authorisation and credit to BCS, The Chartered Institute for IT.

Although BCS, The Chartered Institute for IT has used reasonable endeavours in compiling the document it does not guarantee nor shall it be responsible for reliance upon the contents of the document and shall not be liable for any false, inaccurate or incomplete information. Any reliance placed upon the contents by the reader is at the reader's sole risk and BCS, The Chartered Institute for IT shall not be liable for any consequences of such reliance.

bcs
The Chartered Institute for IT

Copyright © BCS 2025
BCS Foundation Award in Understanding the Problem and Implementing the Solution