



Standards that
create the outstanding

BCS Certificate in Data Management Essentials Syllabus

**Version 3.3
March 2015**

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 March 2015	Updated language requirements for extra time and use of dictionaries. Added Reading List. Standardised the trainer requirements
Version 3.2 September 2012	Updated the additional time requirements and removed definition of terminology. Added a section to cover excerpts from BCS books
Version 3.1 August 2012	Added in details of extra time for foreign language candidates
Version 3.0 May 2012	Logos and footers updated. Reference to ISEB removed throughout document. Document control sheet updated. No change to content of the syllabus.

BCS Certificate in Data Management Essentials

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Who is it aimed at?

The certificate is relevant to anyone requiring an understanding of data / database management.

Learning Outcomes

Holders of the BCS Certificate in Data Management Essentials should be able to:

- Act as members of a Data Management team within an organisation
- Implement an industry standard "best practice" approach to their Data Management work
- Understand the roles and skills required in database administration, data administration and repository administration
- Contribute to Technology Direction Evaluation
- Aid in the construction of a Data Charter
- Practise basic data administration, database administration and repository administration skills
- Develop procedures for managing an organisation's corporate data resource

Course Format and Duration

Candidates can study for this certificate in two ways: by attending training courses provided by BCS Examination Providers or by self-study.

It is the view of BCS that, for full coverage to be achieved, training courses leading to the certificate should normally run for 21 hours.

The course can be delivered a number of different ways from traditional class-room based training to online e-learning.

Eligibility for the Examination

There are no specific pre-requisites for entry to the examination. However, candidates should be suitably prepared and possess the appropriate skills and knowledge to fulfil the objectives above.

Duration and Format of the Examination

The format for the examination is a one hour written examination based on a business scenario preceded by 15 minutes reading time. The examination is open book (you can take written material into the examination room). Candidates need to achieve a minimum of 50% pass the examination. Candidates who are awarded a pass for the examination are awarded the BCS Certificate Data Management Essentials.

Additional time for candidates requiring Reasonable Adjustments due to a disability

Candidates may request additional time if they require reasonable adjustments in line with the BCS [reasonable adjustments policy](#). It will be the Examination Provider's responsibility to make a decision regarding candidate eligibility and keep a record of the decision. This is subject to audit by BCS.

Additional time 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

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

Excerpts from BCS Books

Examination Providers 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 do this. If you are interested in taking out a licence to use BCS published material you should contact the Head of Publishing at BCS outlining the material you wish to copy and the use to which it will be put.

Levels of Knowledge / SFIA Levels

This course will provide candidates with the levels of difficulty / knowledge skill highlighted within the following table, enabling them to develop the skills to operate at the levels of responsibility indicated.

The levels of knowledge and SFIA levels are explained at www.bcs.org/levels

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

Syllabus

1. Data Management Introduction

- 1.1 The role / authority of data management
- 1.2 The Data Charter
- 1.3 Roles and responsibilities within data management
- 1.4 Data Architecture concepts
- 1.5 Data Management tools and techniques

2. Data Administration

- 2.1 Data analysis and data usage
- 2.2 Data definition
- 2.3 Metadata principles
- 2.4 Quality assurance and naming conventions
- 2.5 Ensuring data integrity
- 2.6 Managing data replication
- 2.7 Data privacy, security and recovery
- 2.8 Impact of packages on data administration
- 2.9 Data Modelling (project vs. corporate)
- 2.10 Functional analysis role
- 2.11 'Data over time' issues

3. Database Administration

- 3.1 Physical Data design
- 3.2 Design of non-traditional databases
- 3.3 DBMS selection
- 3.4 Managing the DBMS
- 3.5 Performance measurement and tuning
- 3.6 Distributed DBMS issues
- 3.7 Client / Server issues

4. Repository Information

- 4.1 The role of the data dictionary
- 4.2 Project vs. corporate dictionary issues
- 4.3 Data dictionary and repository product features
- 4.4 Change control
- 4.5 Securing the data dictionary

5. The Scope of the Data Management Function

- 5.1 'Structured Data' operational systems
- 5.2 Data warehousing, OLAP and Data Mining systems
- 5.3 Multi-media systems
- 5.4 Internet and Intranet-based systems
- 5.5 Object Management

Format of the Examination

Type	Scenario based written examination
Duration	1 hour preceded by 15 minutes reading time. Candidates are entitled to an additional 15 minutes if they are sitting the examination in a language that is not their native/official language.
Pre-requisites	None, although accredited training is strongly recommended
Supervised / Invigilated	Yes
Open Book	Yes
Pass Mark	50%
Calculators	Calculators cannot be used during this examination
Distinction Mark	None
Delivery	Paper based examination only

Trainer Criteria

Criteria	<ul style="list-style-type: none">• Hold the BCS Certificate in Data Management Essentials• Have 10 days training experience or a train the trainer qualification• Have a minimum of 3 years' experience in data management
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Classroom Size

Trainer to candidate ratio	1:16
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Recommended Reading List

Title: Business Analysis 3rd Edition

Author: Debra Paul, Donald Yeates and James Cadle

Publisher: BCS

Publication Date: September 2014

ISBN: 978-1780172774

URL: <http://shop.bcs.org>

Title: Principles of Data Management: Facilitating Information Sharing

Author: Keith Gordon **Publisher:** BCS

Publication Date: November 2013

URL: <http://shop.bcs.org>