



**BUSINESS ANALYSIS  
PROFESSIONAL  
TRAINING COURSES**  
International Accreditation

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**DATA ANALYSIS COURSE**

The course is divided into two levels

**1**

Data  
Management  
Essentials  
Level one  
4 days

**2**

Data Analysis  
Level Two  
4 days

## Course Overview

The BCS Professional Certificate in Data Analysis comprises fundamental principles, concepts and techniques used to identify, analyse and model data. The aim of this certification is to enable candidates to define data requirements with detailed understanding and rigour. The certification examination assesses knowledge and understanding of a range of activities and techniques that may be used by business analysts to elicit and analyse data requirements and the business rules inherent in the data, and to define the structure of the data that will support the business requirements in an unambiguous fashion.



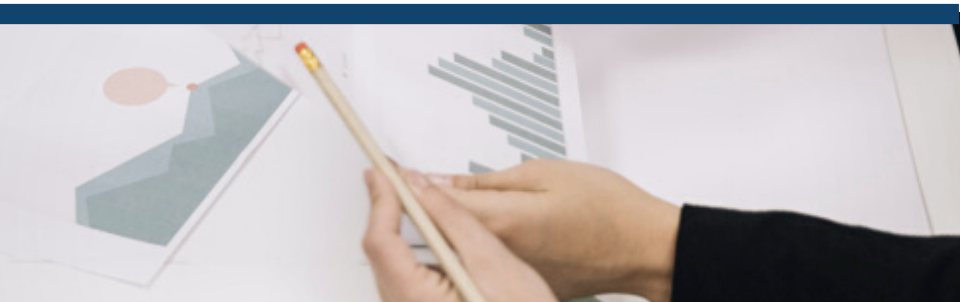
1. Data Management Introduction
  - 1.1 The role / authority of data management
  - 1.2 The Data Charter
  - 1.3 Roles and responsibilities within data management
  - 1.4 Data Architecture concepts
  - 1.5 Data Management tools and techniques
2. Data Administration
  - 2.1 Data analysis and data usage
  - 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



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1. Concepts and principles of data analysis and modelling
  - 1.1 Definitions of terms – data, data analysis, data model
  - 1.2 Rationale for analysing and modelling data
  - 1.3 Techniques used in data analysis
    - Entity relationship modelling
    - Analysis class modelling
    - Normalisation
  - 1.4 Approaches to data analysis and modelling
    - Derived from business needs: ‘top-down’
    - Derived from data sources: ‘bottom-up’
  - 1.5 Application of data analysis artefacts
    - Business modelling
    - System modelling (existing and required) · Impact analysis
    - Communication and training
  
2. Entity relationship modelling
  - 2.1 Content of an entity relationship model
  - 2.2 Identification of entities and attributes
  - 2.3 Entity types and entity occurrences
  - 2.4 Attribute types and attribute occurrences
  - 2.5 Simple and compound keys
  - 2.6 Relationships · Cardinality (1:1, 1:M, M:M) · Optionality
    - Exclusivity
    - Recursion
    - Naming relationships
  - 2.7 Super-types and sub-types



## 3. Rationalising data

### 3.1 Normalisation process and rules

- Unnormalised (UNF)
- First normal form (FNF)
- Second normal form (SNF)
- Third normal form (TNF)

### 3.2 Definition of the TNF tests

### 3.3 Rationalisation of TNF results from multiple data sources

### 3.4 Development of the TNF model Copyright

## 4. Analysis class modelling

### 4.1 Objects and classes

### 4.2 Structure of a class: name, attributes, operations

### 4.3 Associates and multiplicity

### 4.4 Naming associations

### 4.5 Generalisation

## 5. Validation techniques

### 5.1 Cross-referencing matrices: CRUD matrix

### 5.2 Data navigation paths



# Target audience

This certification is relevant for anyone wishing to

- Gain an understanding of the benefits
- Uses of data analysis
- The techniques applied when analysing business data.

In particular, the certification will be of benefit to business analysts, systems analysts, and technical or solution architects.



## Level 1

- Data Management Introduction
- Data Administration
- Database Administration
- Repository Information
- The Scope of the Data Management Function

## Level 2

- Concepts and principles of data analysis and modelling
- Entity relationship modelling
- Rationalising data
- Analysis class modelling
- Validation techniques





# Accreditation



**Data Management Essentials (level 1)** is a part of the International Diploma of Business Analysis, by BCS; British Computers Society, UK. Business Borderlines is the exclusive training provider in Egypt for the international business analysis diploma.

**Data Analysis ( level 2)** is a part of the advanced level of the International Diploma of Business Analysis,

Accredited by BCS, United Kingdom.



# Delivery Modes



Online self-paced



Live Online Classroom



Physical Classroom Course



**Lead Trainer** : Angie Eissa, CBAP, CPRE, MSc BIT,  
BCS BPM, BCS Strategy , TOGAF

- Head of BA Practice at BBL
- Assistant Lecturer Eslsca University – Post Graduate Studies – Master's Degree
- LinkedIn Profile <https://www.linkedin.com/in/angieeissa/>

# Our testimonials



## **Pierre Ammoun :**

Was apprehensive about taking the course, it turned out to be an eye-opener! Explanation by relevant examples with role-play were extremely helpful to understand the concepts. As for the scope of the course, the amount of details covered and how it can be applied in real scenarios is positively scaring! I Highly recommend this course.

**Pierre Ammoun**  
CEO of PCS, Lebanon



## **Emad ElShorbagy :**

The feedback from the attendees was more than perfect, also the organization of the whole process was flawless  
FCA highly recommends BBL for their training services

**Emad ElShorbagy**  
After-Sales Senior Manager





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