BCS Data Analysis Course with Online Exam

Duration: 2 Days **Course Code: SDAM** **Delivery Method: Virtual Learning**

Overview:

Deepen your understanding of data through analysis class modelling and data normalisation. The course has now been updated to include data analytics. **Data Analysis** is an Analytical Skills module for the BCS (ISEB) Advanced International Diploma in Business Analysis.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Business analysts, project managers and solution developers who require a practical approach to analysing and modelling data. Data Analysis is also an Analytical Skills module on the BCS (ISEB) Advanced Diploma in Business Analysis.

Objectives:

- The **Data Analysis** course offers a deep dive into two key approaches to analysing and modelling data – analysis class modelling and data normalisation.
- The course has recently been updated to include a module on data analytics, the interrogating and interpreting of data for the purpose of business decision making. The data analytics component looks at how data can be analysed with a business focus, offering critical insights which can drive decision making and pinpoint why some projects succeed and others fail. Techniques used to validate data against stated requirements are also explored.
- Presented to you by one of the expert training consultants pictured below. Each member of our Data Analysis training team brings substantial data analysis, data modelling and data analytics experience to the programme.

Testing and Certification

During this two day course you'll receive all the training you need to prepare for the BCS Professional Certificate in Data Analysis exam. A pass in this module will contribute to the BCS International Advanced Diploma in Business Analysis. The course is also consistent with SFIA skills DTAN levels 2 and 3.

For delegates attending a classroom, virtual classroom or online course, the exam may be taken remotely using the BCS online proctoring service. This exam consists of 40 multiple-choice questions with a pass mark of 26/40.

Content:

During this course, you will cover:

Introduction to Business Information and Data

- Initial concepts and terminology
- Information versus data
- Data analysis versus data analytics
- Data modelling and data models
- Conceptual, logical and physical data models
- Static and dynamic views of data
- Structured and unstructured data
- The Data Lifecycle

Modelling Data Using Class Diagrams

- Classifying elements of substance and their attributes
- Classes and objects
- Attributes
- Associations and multiplicity
- Types of relationships (one-to-one, one-to-many, many-to-many)
- Resolving many-to-many relationships
- Showing multiple roles
- Aggregation and composition
- Generalisation
- Naming conventions
- Class diagrams

Defining Data Requirements

- Defining data
- Metadata (structural, descriptive and statistical metadata)
- Data definitions
- Domain definitions
- Relational data theory
- Two-dimensional structures
- Using keys to identify data (primary, foreign, concatenated, compound and hierarchic keys)
- Normalisation
- The normalisation process
- Un-normalised form, first normal form, second normal form, third normal form
- Relations
- TNF (Third Normal Form) model
- Aspects of data quality

Obtaining and Recording Data

- Identifying sources of data
- Validating data models using a CRUD matrix
- Data navigation paths and Data Navigation Diagrams

Analysis for Decision Making

- A process for data analytics
- Sourcing datasets
- Data lineage
- Validating and cleansing datasets
- Confirmation bias
- Sampling
- Outliers
- Consistency
- Dataset calculations
- Counting
- Totalling
- Averaging (mean, median, mode)
- Maximum and minimum
- Probability
- NULL values
- Identifying meaningful relationships
- Regression analysis
- Correlation and causation
- Time-series analysis and forecasting
- Interpreting results

Protecting Data

- The imperative for protecting data
- CIA (Confidentiality, Integrity and Availability)
- Data protection principles
- Data ethics
- Data ethics principles
- Online data

Additional Information:

If this course is part of your BCS Advanced Diploma in Business Analysis programme you have a choice of further modules you can take including Business Architecture, Agile Business Analysis, Advanced Requirements Engineering, Stakeholder Engagement, Business Finance, Benefits Planning and Realisation and Team Leadership. The structure of the certification is shown here .

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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