Course Title – BCS Foundation Award – Data visualisation	**Course duration –** 1 day
Exam - included	**Exam type -** Invigilated
Qualification – BCS Foundation Award – Data visualisation	

Course Syllabus

1. Data driven decision making

1.1 Outline the uses of data within an organisation.
1.2 Recognise the process of formatting data to make decisions.
1.3 Identify issues with using data to make decisions.

2. Data storing and analysis tools

2.1 Explain how to store data.
2.2 Describe the requirements regarding data protection.
2.3 Illustrate the process of using technology to analyse data.

3. Data presentation tools and techniques

3.1 Classify the tools and techniques used to present data, considering the following formats:

- 3.1.1 Written form
- 3.1.2 Verbal form
- 3.1.3 Pictorial form
- 3.1.4 Sounds form
- 3.1.5 Dashboards and infographics
- 3.1.6 Virtual reality and Augmented reality
- 3.1.7 Sounds

4. Human and machine learning together

4.1 Recognise the following learning environment examples where both humans and machines would be required to learn in conjunction:

- 4.1.1 Virtual reality/Augmented reality e.g. Flight simulators
- 4.1.2 Ergonomics e.g. Designing an operation interface for a surgeon
- 4.1.3 Digital twin e.g. Ocado, online supermarket
- 4.1.4 Immersive environment (the audience of the future)

Course Overview

Our BCS Foundation Award course in Data Visualisation is designed for anyone wishing to gain an understanding of how data is used to make decisions in an organisation and the importance of presenting accurate data in a way that enables decision making to happen. It includes the principles of data driven decision making, and the tools that can be employed in data storage, analysis and presentation.

This award will enable you to understand these concepts at a Foundation Level, incorporating processes, frameworks and techniques used. It also looks towards the future use of data and how AI can present data in different ways to help organisations better understand their data.

Learning Outcomes

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

- Data driven decision making
- Data storing and analysis tools
- Data presentation tools and techniques
- Human and machine learning together

Who should attend?

This award is suitable for any individual wishing to understand the opportunities presented by AI and how these can benefit an organisation.

Entry-Level Requirements

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

What's included?

1 day in-person classroom training or 1-day virtual online training

Exam information

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	18 multiple choice questions, 1 scenario-based question
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.

Qualifications

BCS Foundation Award -

What else?

This award has been created alongside a selection of other awards available from BCS, which offer candidates a clear pathway of progression into other disciplines of IT. This makes it ideally suited for those looking for a change of career, an upskilling workforce, and sustainable employers.

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

1. **Business innovation**
2. **Data**
3. **Ethics**
4. **Machine learning and other AI techniques**

To receive the Foundation Diploma in AI you need to **achieve eight awards in total** – one or more award from each of the categories

The courses are as follows:

- **How AI can support your organisation**
- **How to manage risk**
- **Understanding the problem and implementing the solution**
- **Understanding data in your organisation**
- **Big Data**
- **Data visualisation**
- **Understanding ethical principles in the IT profession**
- **Understanding the role of ethics in the responsible use of AI**
- **AI and the digital ecosystem**
- **Knowledge-based systems**
- **Smart products, robotics and automation**
- **Machine learning**
- **Generative AI**