

Course Title – BCS Foundation Certificate	Course duration – 3.0 days
Exam - included	Exam type - Invigilated
Qualification – BCS Foundation Certificate	

Course Syllabus

1. An Introduction to AI and Historical Development

- 1.1 State the key definitions of key artificial intelligence terms.
- 1.2 Describe key milestones in the development of artificial intelligence.
- 1.3 Describe different types of AI.
- 1.4 Explain the impact of AI on society.
- 1.5 Describe sustainability measures to help reduce the environmental impact of AI.

2. Ethical and legal considerations

- 2.1 Describe ethical concerns, including bias and privacy, in AI.
- 2.2 Describe the importance of guiding principles in ethical AI development.
- 2.3 Explain strategies for addressing ethical challenges in AI projects.
- 2.4 Explain the role of regulation in AI.
- 2.5 Explain the process of risk management in AI.

3. Enablers of Artificial Intelligence

- 3.1 List common examples of AI.
- 3.2 Describe the role of robotics in AI.
- 3.3 Describe machine learning.
- 3.4 Identify common machine learning concepts.
- 3.5 Describe supervised and unsupervised learning.

4. Finding and using data in Artificial Intelligence

- 4.1 Describe key data terms.
- 4.2 Describe the characteristics of data quality and why it is important in AI.
- 4.3 Explain the risks associated with handling data in AI and how to minimise them.
- 4.4 Describe the purpose and use of big data.
- 4.5 Explain data visualisation techniques and tools.
- 4.6 Describe key generative AI terms.
- 4.7 Describe the purpose and use of generative AI including large language models.
- 4.8 Describe how data is used to train AI in the Machine Learning process.

5. Using AI in your organisation

- 5.1 Identify opportunities for AI in your organisation.
- 5.2 List the contents and structure of a business case.
- 5.3 Identify and categorise stakeholders relevant to an AI project.
- 5.4 Describe project management approaches.
- 5.5 Identify the risks, costs and benefits associated with a proposed solution.
- 5.6 Describe the ongoing governance activities required when implementing AI.

6. Future planning and impact – Human plus machine

- 6.1 Describe the roles and career opportunities presented by AI.
- 6.2 Identify AI uses in the real world.
- 6.3 Explain AI's impact on society, and the future of AI.
- 6.4 Describe consciousness and its impact on ethical AI.

Course Overview

Artificial Intelligence (AI) has recently surged in popularity, becoming part of everyday thinking, transforming industries, and reshaping the future of technology. It revolutionises how systems learn from experience and mimic human intelligence.

The BCS Foundation Certificate in Artificial Intelligence equips you with knowledge of key AI techniques, their use in the real world and their impact on our lives. This syllabus explores the historical journey of AI, the advantages and challenges of ethical and sustainable AI, the key enablers of AI including data and the future interplay between AI and human roles in the workplace.

Building on the foundational concepts introduced in the BCS Essentials Certificate in AI, this certification offers a comprehensive understanding crucial for navigating the rapidly evolving AI landscape.

Learning Outcomes

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

- The meaning of AI including its history and key principles.
- The legal, ethical and regulatory considerations when using AI.
- How humans can use AI to support business activities.
- How to identify opportunities for AI and implement them.
- The impact of AI on the future of society and business.

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?

3 days in-person classroom training or 3-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	40 multiple choice questions
Duration	60 minutes
Supervised	Yes
Open book	No (no materials can be taken into the examination room)
Passmark	26/40 (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 Certificate

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.

If you require additional guidance or advice, please do not hesitate to contact us for more information.