

Course Title – BCS Foundation Award – AI and the Digital Ecosystem	Course duration – 1 day
Exam - included	Exam type - Invigilated
Qualification – BCS Foundation Award – AI and the Digital Ecosystem	

Course Syllabus

1. Key components of AI

- 1.1 Recall the general definition of human intelligence. (see Encyclopaedia Britannica)
- 1.2 State a general definition of artificial intelligence and how it relates to human intelligence.
- 1.3 Describe how the following are used within an application of Artificial intelligence, Machine Learning, Deep Learning, Data Science, Knowledge-Based systems, Robotics and Automation.

2. AI and the digital ecosystem

- 2.1 Explain what a digital ecosystem is.
- 2.2 Describe an ecosystem mindset.
- 2.3 Identify how AI can facilitate a digital ecosystem that works intuitively.
- 2.4 Discuss why you might make use of AI to create a digital ecosystem as a driver or enabler.

3. The relationship between AI and Data

- 3.1 Explain data infrastructure with specific relevance to Big Data.
- 3.2 Describe the following concepts within data architecture.
- 3.3 Suggest ways in which AI can support in the utilisation of Big Data.
- 3.4 Recognise different approaches used within the testing of AI systems.

4. The potential future of AI

- 4.1 Identify industries that can invest in AI.
- 4.2 Recognise the role of AI in raising human intelligence.
- 4.3 Explain the concept of digital singularity.
- 4.4 Explain the need for individuals and organisations to maintain and update their skills and knowledge in relation to current and emerging technologies.
- 4.5 Identify the role the IT professional plays in supporting a utopian future with AI.

Course overview

A digital ecosystem is fundamental to the operations of any modern business, and with the addition of AI it has the capability to enable an organisation to better service its customers and manage its data.

Our training introduces the key concepts associated with AI and explores its relationship with the systems and processes that make up the digital ecosystem. It will consider how AI can empower organisation to utilise Big Data through the use of Business Analysis and Machine Learning and encourages you to consider a future vision of the world that is powered by AI.

Learning Outcomes

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

- An understanding of the key components of AI
- An understanding of the relationship between AI and The Digital Ecosystem
- An understanding of the relationship between AI and Data
- An understanding of the role the IT professional plays in supporting AI for the future

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	16 multiple choice questions, 2 scenario-based questions
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 – AI and the Digital Ecosystem

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**