

Course Title: BCS Artificial Intelligence (AI) Essentials	Course Duration: 1.0 Day
Exam: Included	Exam Type: Proctored Exam
Qualification: BCS Artificial Intelligence (AI) Essentials Certificate	

Course Syllabus

You will cover the following topics on our Artificial Intelligence (AI) Essentials training course:

1. An Introduction to AI and Historical Development

- 1.1 State the definitions of key artificial intelligence terms.
- 1.2 Identify key milestones in the development of artificial intelligence.
- 1.3 Identify different types of AI

2. Ethical and Legal Considerations

- 2.1 Identify the role of ethics in AI.
- 2.2 State key ethical concerns in Al.
- 2.3 Identify guiding principles in the use of ethical AI.

3. Enablers of Artificial Intelligence

- 3.1 List common examples of AI.
- 3.2 Identify robotics in AI.
- 3.3 Describe machine learning.
- 3.4 Identify common machine learning concepts.

4. Finding and Using Data in Artificial Intelligence

- 4.1 State key data terms.
- 4.2 Identify the characteristics of data quality
- 4.3 State the risks associated with handling data in Al.
- 4.4 Identify data visualisation techniques and tools.
- 4.5 State key generative AI terms.



4.6 Identify the use of data in the Machine Learning process.

5. Using AI in Your Organisation

- 5.1 Identify opportunities for AI in your organisation.
- 5.2 Identify project management approaches.
- 5.3 Identify governance activities associated with 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 Identify Al's impact on society.
- 6.4 Describe the future of AI.

Course Overview

Our one-day BCS Artificial Intelligence (AI) Essentials training course covers the different types of AI, the basic process of Machine Learning (ML), the challenges and risks associated with AI projects, and finally the future of AI and humans in the workplace.

Course Learning Outcomes

BCS Membership Offer: If you do not hold a BCS certification and successfully pass the examination for this training course - you will be given one year's complementary BCS Membership. This offer is only valid for your first BCS qualification.

Our one-day BCS Artificial Intelligence (AI) Essentials training course covers the different types of AI, the basic process of Machine Learning (ML), the challenges and risks associated with AI projects, and finally the future of AI and humans in the workplace.

Audience

Our Artificial Intelligence (AI) Essentials training course is focused on professionals internationally with an interest in, or a need to implement AI in an organisation. Professionals working in areas such as Science, Engineering, Knowledge Engineering, Finance, or IT Services. The following roles should be interested:

- Engineers
- Scientists
- Professional Research Managers
- Chief Technical Officers
- Chief Information Officers
- Organisational Change Practitioners & Managers
- Business Change Practitioners & Managers
- Service Architects & Managers
- Program & Planning Managers
- Al Project Managers
- Service Provider Portfolio Strategists / Leads



- Process Architects & Managers
- Business Strategists & Consultants
- Web Page Developers
- Al Researchers
- Al Engineers
- Al Data Analysts
- Data Scientists
- Machine Learning Engineers
- Deep Learning Engineers
- Robotics Scientists
- Big Data Engineers
- Business Intelligence Developers
- Research Scientists
- Product Managers
- User Experience (UX) Designers / Developers
- Natural Language Processing Engineers

Entry-Level Requirements

There are no specific pre-requisites for entry to the Artificial Intelligence (AI) Essentials training course or examination.

It is highly recommended that candidates have a good knowledge of computers and a basic understanding of data using computers (e.g. spreadsheets).

Recommended Reading

There is no recommended reading associated with our Artificial Intelligence (AI) Essentials training course.

What's Included

You will be provided with the following materials on our Artificial Intelligence (AI) Essentials training course:

- Artificial Intelligence (AI) Essentials Course Manual
- Artificial Intelligence (AI) Essentials Sample Examination
- Official Artificial Intelligence (AI) Essentials Examination

Exam Information

BCS Artificial Intelligence (AI) Essentials Examination:

• Exam Duration: 30 Minutes

• Exam Format: Closed Book, 20 Multiple Choice Questions

• Exam Delivery: Online, Webcam Proctored

• Exam Pass Mark: 65% (13/20 Questions)

Candidate Responsibilities

• You need to complete registrations for both BCS and Questionmark.



- You will receive an email inviting you to register on the e-professional portal. Once you have completed this registration, you will be able to see the booking details that your training provider had given to BCS.
- The exam date and time may not reflect what you will book with Questionmark, but we will update this once the exam has taken place so your certificate will have the correct date.
- You will also receive an email with log in details for Questionmark. This will enable you to complete your registration and book your exam. The link for registering is here.
- If you are unable to see an assessment to schedule once you have registered, please contact BCS via customerservice@bcs.uk.
- If you're unable to select a remote proctored time and date, contact support@questionmark.com.

Create Proctor Session

- To select the exam date and time click on 'Schedule'. If you have multiple exams to schedule it is advised that you only schedule the exam you wish to take otherwise you may encounter an error 500 screen.
- If you do encounter this then please clear your browser cache before proceeding.

What's Next

Our <u>Artificial Intelligence (AI) Foundation</u> training course builds upon the basic knowledge of AI. You will be taken from a basic understanding of AI to the creation of your own AI product.

The Artificial Intelligence (AI) Essentials training course leads onto our three-day <u>Artificial Intelligence (AI) Foundation</u> training course.

Additional Information

Our Artificial Intelligence (AI) Essentials training course will give you a basic understanding of the terminology and concepts used by those working in Artificial Intelligence programs and projects.

Artificial Intelligence (AI) is a methodology for using a non-human system to learn from experience and imitate human intelligent behaviour. The essentials certificate tests a candidate's knowledge and understanding of the terminology and the general principles of AI.

Our Artificial Intelligence (AI) Essentials training course was developed and delivered by Dr Andrew Lowe - Andrew has 20 years plus of experience in academia and industry working with high-performance computing. He has worked with high-tech startups and large high-tech engineering organisations using some of the world's most powerful computers. Andrew uses AI on a daily basis in the analysis of simulations (e.g. Weather, Extreme Environments, Engineering) he builds.