



Course Title: BCS Artificial Intelligence (AI) Foundation Online	
Exam: Included	Exam Type: Proctored Exam
Qualification: BCS Artificial Intelligence (AI) Foundation Certificate	

Course Syllabus

Our BCS Artificial Intelligence (AI) Foundation online training course will cover the following topics:

Syllabus & Learning Objectives

1. Ethical And Sustainable Human And Artificial Intelligence (25%)

After this section of the Artificial Intelligence (AI) Foundation training course is complete, you will gain an understanding of the following:

- Recall the general definition of Human Intelligence and Artificial Intelligence
- Make parallels between 'learning from experience' and Machine Learning (ML) via Tom Mitchell's definition
- Understand that ML is a significant contribution to the growth of AI
- Describe how AI is part of Universal Design and The Fourth Industrial Revolution
- Describe a modern approach to human logical levels of thinking using Robert Dilts' Model.
- Describe the three fundamental areas of sustainability.

2. Applying the Benefits, Challenges, And Risks of Machine Learning (30%)

At the end of this section, you will have completed over half of the course material. By now, and in combination with what you've learned in the previous section about AL and ML, you will be able to apply and understand the following:

- Explain the benefits of Artificial Intelligence
- List advantages of machine and human-machine systems
- Describe the challenges of Artificial Intelligence
- General examples of AI limitations compared to human systems
- General ethical challenges AI raises
- Demonstrate understanding of the risks of Artificial Intelligence
- Give at least one general example of the risks of AI
- Identify a typical funding source for AI projects
- List opportunities for AI
- Describe how sustainability relates to AI and how our values will drive the use of AI and change our society.

3. An Introduction To Machine Learning Theory And Practice (35%)

After this section of the Artificial Intelligence (AI) Foundation training course is complete, you will be able to apply your knowledge from the previous sections and understand the following:

- Demonstrate an understanding of the AI intelligent agent description



- Identify the differences between AI and ML
- List the four rational agent dependencies
- Describe agents in terms of performance measure, environment, actuators, and sensors
- Describe four types of agent: reflex, model-based reflex, goal-based, and utility-based
- Give typical examples of Machine Learning in the following contexts: Business, Social (Media, Entertainment), Science
- Recall which typical, narrow AI capability is useful in ML and AI agents' functionality
- Recall the basic theory of ML
- Describe the basic schematic of a neural network
- Know how to build a practical Machine Learning Toolkit

4. The Management, Roles And Responsibilities Of Humans And Machines. (10%)

Completing this section finalises your understanding of all aspects required to pass the Artificial Intelligence (AI) Foundation certificate. In this final section, you will understand:

- Demonstrate an understanding that Artificial Intelligence (in particular, Machine Learning) will drive humans and machines to work together
- List future directions of humans and machines working together
- Describe a 'learning from experience' Agile approach to projects
- Describe the type of team members needed for an Agile project

Course Overview

Our BCS Artificial Intelligence (AI) Foundation online training course will teach you the building blocks of AI and how to use your newfound understanding of Machine Learning.

Our BCS Artificial Intelligence (AI) Foundation online training course will cover AI, Machine Learning and Neural Networks and be able to apply your knowledge to your current or future career.

If you would like immediate access, then please purchase the [BCS Artificial Intelligence \(AI\) Foundation Online](#) on the [Purple Griffon E-Learning Portal](#).

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 BCS Artificial Intelligence (AI) Foundation online training course will teach you about AI, Machine Learning and Neural Networks - you can use this knowledge in your current or future career.

You will explore the AI and technological requirements to develop a machine learning portfolio and continue with self-study beyond the scope of our BCS Artificial Intelligence (AI) Foundation online training course

Audience

The target audience for our Artificial Intelligence (AI) Foundation online training course is comprised of individuals with an interest in (or need to implement) AI in an organisation. We specifically target and attract those working in areas such as science, engineering, knowledge engineering, finance, or IT services.



Below is a list of roles who would benefit most from taking this course, though anyone interested in AI is welcome:

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

AI Project Managers

Service Provider Portfolio Strategists / Leads

Process Architects & Managers

Business Strategists & Consultants

Web Page Developers

AI Researchers

AI Engineers

AI 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 entry-level requirements for our BCS Artificial Intelligence (AI) Foundation online training course.

Recommended Reading

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

What's Included

Our BCS Artificial Intelligence (AI) Foundation online training course includes:

- Quizzes
- Exercises
- Sample Exam
- BCS Artificial Intelligence (AI) Foundation Examination

Exam Information

BCS Artificial Intelligence (AI) Foundation Examination:

- Exam Duration: 60 Minutes
- Exam Format: Closed Book, 40 Multiple Choice Questions
- Exam Delivery: Online, Webcam Proctored
- Exam Pass Mark: 26/40

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

After our BCS Artificial Intelligence (AI) Foundation online training course, you should consider learning about the ITIL® 4 Framework:

- [ITIL® 4 Foundation](#)
- [ITIL® 4 Specialist Create, Deliver & Support \(CDS\)](#)
- [ITIL® 4 Specialist Drive Stakeholder Value \(DSV\)](#)

- [ITIL® 4 Specialist High Velocity IT \(HVIT\)](#)
- [ITIL® 4 Strategist Direct Plan & Improve \(DPI\)](#)
- [ITIL® 4 Leader Digital & IT Strategy \(DITS\)](#)
- [ITIL® 4 Managing Professional \(MP\)](#)
- [ITIL® 4 Strategic Leader \(SL\)](#)
- [ITIL® 4 Specialist Acquiring & Managing Cloud Services \(AMCS\)](#)
- [ITIL® 4 Specialist Sustainability In Digital & IT \(SDIT\)](#)

Additional Information

When you have completed the BCS Artificial Intelligence (AI) Foundation online training course and passed the exam, you will be awarded the Artificial Intelligence (AI) Foundation certificate.