PURPLE GRIFFON
The IT Service Management Training & Consultancy Specialists

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

Course Syllabus

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

1. Artificial & Human Intelligence: Introduction & History (25%)

You will be able to:

1.1 Recall the general definition of human and Artificial Intelligence (AI)
1.2 Describe 'learning from experience' and how it relates to Machine Learning (ML)
1.3 Understand what enabled the growth of Artificial Intelligence
1.4 Describe how Machine Learning is part of Universal Design and The Fourth Industrial Revolution
1.4.1 Know the general description of human and Artificial Intelligence
1.4.2 Describe *'learning from experience'* and how it relates to Machine Learning – Tom Mitchell's explicit definition
1.4.3 Know that ML is a significant contribution to Artificial Intelligence
1.4.4 Describe how AI is part of *'Universal Design,'* and *'The Fourth Industrial Revolution'*

2. Examples Of AI: Benefits, Challenges & Risks (30%)

You will be able to:

2.1 Explain the benefits of Artificial Intelligence and list advantages of the machine and human and machine systems
2.2 Describe the challenges of Artificial Intelligence and give: general examples of the limitations of AI compared to human systems, general ethical challenges AI raises
2.3 Demonstrate understanding of the risks of Artificial Intelligence and give at least one general example of the risks of AI
2.3.1 Know the benefits of Artificial Intelligence
12.3.1.1 List advantages of machine and human and machine systems
2.3.2 Know the challenges of Artificial Intelligence
2.3.2.1 Give general examples of the limitations of AI compared to human systems
2.3.2.2 Give general ethical challenges AI raises
2.3.3 Know the risks of Artificial Intelligence
2.3.3.1 Give a general example of the risks of AI
2.3.3.2 Identify a typical funding source for AI projects
2.3.4 List opportunities for AI

3. Introduction To Machine Learning (35%)

You will be able to:

3.1 Demonstrate understanding of the approach to a Machine Learning project and list and describe each stage
3.2 Give typical examples of Machine Learning in the following contexts: Business, Social (Media, Entertainment), Science
3.3 Describe both what and where the resources for Machine Learning are
3.3.1 Understand the AI intelligent agent description and can identify the differences with Machine Learning (ML)
3.3.1.1 List the four rational agent dependencies
3.3.1.2 Describe agents in terms of Performance Measure, Environment, Actuators and Sensors
3.3.1.3 Describe four types of agent, Reflex, Model-based reflex, Goal-based agent and Utility-based agent.
3.3.2 Know typical examples of Machine Learning in business, social (media, entertainment) and science
3.3.3 Know what typical narrow AI functionality is useful in ML and AI agents functionality
3.3.4 Describe and give examples of supervised, un-supervised, semi-supervised and reinforcement machine learning
3.3.5 Describe the basic schematic of a Neural Network

4.The Future of Artificial Intelligence – Human and Machine Together (10%)

You will be able to:

4.1 Demonstrate an understanding that Artificial Intelligence (in particular, Machine Learning) will drive humans and machines to work together
4.2 List future directions of humans and machines working together

Course Overview

Our BCS Artificial Intelligence (AI) Essentials online 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.

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

If you would like immediate access, then please purchase the BCS Artificial Intelligence (AI) Essentials training course 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.

The Artificial Intelligence (AI) Essentials online training course leads onto our three-day BCS Artificial Intelligence (AI) Foundation Online training course.

Audience

The target audience for our Artificial Intelligence (AI) Essentials 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) Essentials online training course.

It is highly recommended that you have a good knowledge of computers and a basic understanding of data using computers, for example: spreadsheets.

Recommended Reading

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

What's Included

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

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

Additional Information

Our Artificial Intelligence (AI) Essentials online training course will provide you with a complete introduction to Artificial Intelligence for those who need to understand the terminology and concepts used in this area.