Course Title: BCS Foundation Award - Smart Products, Robotics And Automation	**Course Duration**: 3.0 Days
Exam: Included	**Exam Type**: Proctored Exam
Qualification: BCS Foundation Award - Smart Products, Robotics And Automation	

Course Syllabus

1. The Use Of Robots And Automation In The Workplace

You will be able to:

1.1 Describe what a robot is with reference to examples
1.2 Define what an intelligent robot is.
1.3 Outline a brief history of the use of robots within technology
1.4 Describe Intelligent RPA.
1.5 Describe the current needs which are driving new innovations in robotics and smart technologies in the market.
1.6 Outline the basic ethical principles surrounding the creation of smart products and robotics.

2. Identifying, Creating, And Maintaining Automation

You will be able to:

2.1 Describe the challenges of smart product and robotic logic.
2.2 Describe how a smart product or robot can be supported.
2.3 Describe how smart products and robots are tested.

3. The Future Of Robots

You will be able to:

3.1 Describe the requirements for ensuring an environment of continuous innovation for the future development of robots and smart products.
3.2 Identify the current limitations in robotic/machine intelligence.
3.3 Identify examples of where robots, smart products and humans coexist.

Course Overview

Our three-day BCS Foundation Award - Smart Products, Robotics And Automation training course is designed for those wishing to gain an understanding of the role of robotics and automation in the workplace. As robots and SMART technology become more common within society and the workplace, it is important to understand how they can be used and maintained appropriately and safely.

Our BCS Foundation Award - Smart Products, Robotics And Automation training course will introduce you to the concept of intelligent robots, Deep Learning and the use of Neural Networks. You will also be encouraged to explore the potential use of robots

in the future workplace and consider their current limitations.

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.

This award sits within the **Machine learning and other AI techniques** area of the AI Foundation Pathway and offers a very accessible introduction to the technology that's shaping the future.

You'll learn about:

- The Use Of Robots & Automation In The Workplace
- Identifying, Creating & Maintaining Automation
- The Future Of Robots

Audience

- Digital professionals looking to build their technical knowledge in AI and machine learning, with a focus on individual components
- Those who need to understand the interaction between humans and automated systems with a view to developing or implementing AI solutions
- IT professionals who are transitioning to a career in AI
- Individuals with an interest in AI and a background in science, engineering, knowledge engineering, finance, education or IT services

Entry-Level Requirements

There are no specific entry requirements for this award. However, some professional experience in a business or IT environment may be advantageous.

Recommended Reading

The following titles are suggested reading for anyone undertaking this award. You should be encouraged to explore other available sources.

Title: The Singularity is Near
Author: Raymond Kurzweil
Publisher: Duckworth
Publication Date: March 2006
ISBN: 0715635611

Title: Human + Machine: Reimagining Work in the Age of AI
Author: Paul R. Daugherty and H. James Wilson
Publisher: Harvard Business Review Press
Publication Date: March 2018
ISBN: 1633693864

What's Included

- BCS Foundation Award - Smart Products, Robotics And Automation Materials
- BCS Foundation Award - Smart Products, Robotics And Automation Examination

Exam Information

BCS Foundation Award - Smart Products, Robotics And Automation Examination:

- Type: 12 Multiple Choice Questions, 4 Scenario Based Question
- Duration: 30 Minutes
- Supervised: Yes
- Open Book: No (no materials can be taken into the examination room)
- Pass Mark: 13/20 (65%)
- Delivery: Digital Format Only.

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

Other Machine Learning & Other AI Techniques awards in the AI Foundation Pathway include:

- BCS Foundation Award - Knowledge-Based Systems
- BCS Foundation Award - AI And The Digital Eco System
- BCS Foundation Award - Machine Learning

Additional Information

Robots stepped out of sci-fi and into real life a long time ago… You will build your core knowledge of how and where they're being used, the level of maintenance they require, and their potential for the workplace in the years ahead.