

## Artificial Intelligence Essentials (AI) + Exam

Duration: 1 Day Course Code: AIE

### Overview:

Take your first steps in AI training to understand the principles of AI, its benefits and risks, and the processes behind Machine Learning.

Examples of AI have been in the news a lot lately, it started with chatbots like Google Assistant and now ChatGPT. Of course, AI is much more than just chatbots, yet we will also discuss this to learn the do's and don't of this.

This course will teach you the potential benefits of AI; types of Artificial Intelligence (AI); the basic process of Machine Learning (ML); the challenges and risks associated with an AI project, and the future of AI and Humans in work

### Target Audience:

The Artificial Intelligence Essentials certificate is aimed at individuals with an interest in (or need for) AI in an organisation, particularly those working in areas such as science, engineering, knowledge technology, finance or IT services.

The following job roles are mostly eligible;

Engineers Scientists Professional research managers Chief technical officers Chief information officers Organizational change practitioners and managers Business change practitioners and managers Service architects and managers Program and planning managers Service provider portfolio strategists / leads Process architects and managers Business strategists and consultants Web page developers

### Objectives:

- Recall the general definition of human and Artificial Intelligence (AI).
- Describe 'learning from experience' and how it relates to Machine Learning (ML) (Tom Mitchell's explicit definition).
- Understand that ML is a significant contribution to the growth of Artificial Intelligence.
- Describe how AI is part of 'Universal Design,' and 'The Fourth Industrial Revolution'.
- Describe the challenges of Artificial Intelligence, and give general examples of the limitations of AI compared to human systems, general ethical challenges AI raises.
- Demonstrate understanding of the risks of Artificial Intelligence, identify a typical funding source for AI projects and list opportunities for AI.
- 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.

### Prerequisites:

No specific prior knowledge is required.

### Testing and Certification

This class comes with an online proctored exam voucher. These will have a validity of 12 months. You will need to schedule and complete your exams within this time frame.

Successful completion of the EXIN BCS Artificial Intelligence Essentials exam:

#### Examination Details

- Examination type: Multiple-choice Questions
- Number of questions: 20
- Pass mark: 65% (13 / 20 questions)
- Open book/notes: No
- Electronic equipment/aides permitted: No
- Exam duration: 30 minutes

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## Content:

### 1. Artificial and Human Intelligence: An Introduction and History

- general definition of human and Artificial Intelligence (AI).
- 'learning from experience' and how it relates to Machine Learning (ML) (Tom Mitchell's explicit definition).
- ML is a significant contribution to the growth of Artificial Intelligence.
- AI is part of 'Universal Design,' and 'The Fourth Industrial Revolution'.

### 2. Examples of AI: Benefits, Challenges and Risks

- benefits of Artificial Intelligence
- advantages of machine and human and machine systems;
- challenges of Artificial Intelligence
- the limitations of AI compared to human systems
- general ethical challenges AI raises
- understanding of the risks of Artificial Intelligence
- funding source for AI projects
- opportunities for AI

### 3. An introduction to Machine Learning

- AI intelligent agent
- differences with Machine Learning (ML)
- the four rational agent dependencies,
- performance measure, environment, actuators and sensors,
- reflex, model-based reflex, goal-based and utility-based.

examples of Machine Learning in the following contexts:

- business

- social (media, entertainment)

■ - science

■ which typical, narrow AI capability is useful in ML and AI agents' functionality;

forms of ML:

- supervised

- unsupervised

■ - reinforcement

■ the basic schematic of a neural network.

### 4. The Future of Artificial Intelligence – Human and Machine Together

- Artificial Intelligence (in particular Machine Learning) will drive humans and machines to work together
- list future directions of humans and machines working together

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## Further Information:

For More information, or to book your course, please call us on 0800/84.009

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[www.globalknowledge.com/en-be/](http://www.globalknowledge.com/en-be/)