

# **Q:** What is the difference between Artificial Intelligence, Machine Learning and Deep Learning?

#### **A:**

In simple terms, AI encompasses the broad concept of machines simulating human intelligence. Machine Learning is a subset of AI where machines improve from data without direct instruction. Deep Learning, a more specialized subset, excels at interpreting complex data structures.

They are all interconnected concepts but differ in scope and complexity:

- Artificial Intelligence (AI)— mimics human cognitive functions. It involves designing systems that can learn and make decisions, enhancing how machines perform tasks traditionally requiring human intelligence.
- Machine Learning it's a way for machines to learn without being explicitly programmed. Instead of telling a computer exactly what to do, we give it data and let it figure out the patterns and

rules on its own. This process is akin to providing a student with numerous case studies to facilitate learning.

 Deep Learning — a sophisticated form of Machine Learning, utilises artificial neural networks to process complex data patterns. By modeling data structures in layers, it allows computers to recognize complex patterns and make intelligent decisions.

## **Q:** What are the opportunities and risks with AI?

AI presents both opportunities and risks to individuals and societies. When used responsibly and ethically, it can help shape a resilient digital future. One that respects privacy, safety, security, and reliability.

> For organizations, AI can streamline operations, unlock new revenue streams through advanced data analysis, and foster more engaging customer interactions. For individuals, AI enhances daily life through personalized services, health advancements, and smarter home technology, making everyday tasks easier and more efficient.

However, these advancements come with risks that must be carefully managed. Key concerns include cybersecurity threats, as AI systems are targets for sophisticated cyber attacks. Ethical considerations are crucial, particularly in how data is used and decisions are made, to avoid bias and ensure fairness. Maintaining user privacy is paramount to comply with regulations and retain public trust.

Our AI management system (ISO/IEC 42001:2023) course, or our risk management courses (ISO 23894) will provide you with the information, tools and techniques you need to be able to manage risk for your organization efficiently.

### **Q:** How could AI benefit society?

AI offers the potential to enable us to work smarter and accelerate progress towards a sustainable world. It is already transforming numerous sectors by optimizing processes, enhancing precision, and automating tasks, which contributes to more efficient resource use and faster decision-making.

For example, it can improve healthcare through the use of AI powered diagnostic

tools, or enhance safety and security by predicting, policing or controlling autonomous vehicles to reduce accidents.

You can find out more about how AI can help move us towards Society 5.0 and bring benefits across society in our <u>whitepaper</u>.

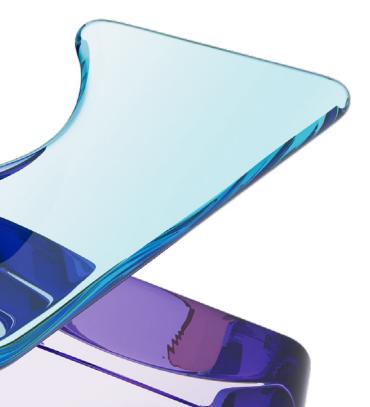
### **Q:** How can I quickly learn about AI to help my organization?

BSI offers a comprehensive suite of specialist AI courses, management systems training, and support concepts. These are suitable for individuals at any stage of their AI journey and in any role, helping you to meet your organization's AI objectives.

Whether you prefer on-demand learning, instructor-led sessions, in-person, or virtual

environments, our flexible training formats are designed to suit your blended learning preferences. We also provide additional resources and support (link to resources).

You can explore our comprehensive suite of AI training programs here.





### **Q:** What is an AI Management System and how can it help my organization?

**A:** 

AI management system (ISO/IEC 42001:2023) is intended for use by an organization providing or using products or services that utilize AI systems. It helps the organization and key stakeholders within it, to develop, provide or use AI systems responsibly. It is applicable to any organization, regardless of size, type and nature, that provides or uses products or services that utilize AI systems.



#### **Q:** Why consider BSI AI training?

**A:** 

Our AI Training courses provide you with the organizational understanding, robust governance, rigorous risk management, and adherence to legal guidelines, that are all crucial to the efficient and proper management of AI.

They will enable you and your organization to:

- Ensure the ethical and responsible use of AI aligns with organizational goals.
- Gain valuable qualifications that equip you to respond to organizational challenges around AI, bringing greater benefits to your organization.
- Build your or your team's expertise in AI and gain credibility in your market with a qualification-earned mark of trust.
- Address the emerging challenges and opportunities in AI within the organization to help deliver immediate and long-term strategic goals — highlight these skills and competencies with a BSI mark of trust.





Contact us today to discuss the best course or qualifications pathway for you.

Speak to our AI experts

