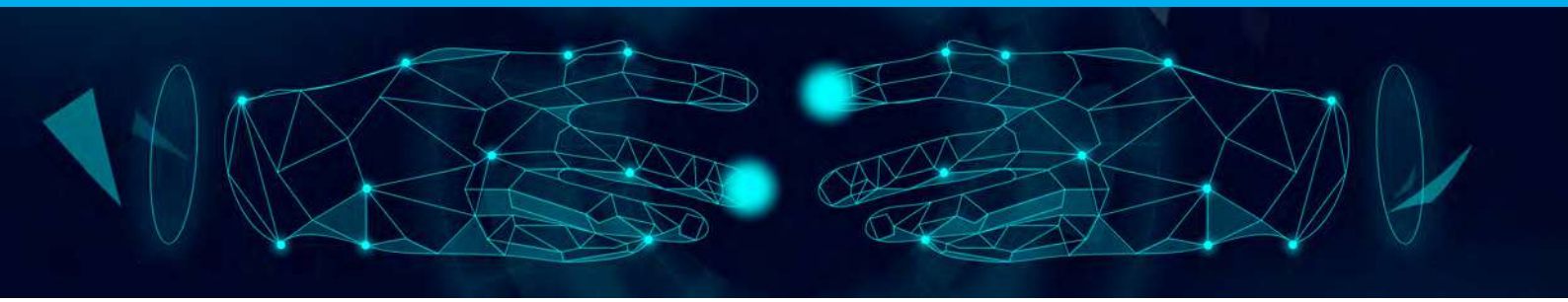
ICDL Arabia

Artificial Intelligence Certification

Summary



This module provides a broad understanding of the Artificial Intelligence (AI) fields and the techniques used to understand how AI is applied to different scenarios and problems.

After studying this module, candidates should be able to:

- Explain "Artificial Intelligence" and how to identify systems using Artificial Intelligence.
- Understand and differentiate among the major types and methodologies used in Artificial Intelligence.
- Explain how Artificial Intelligence enables capabilities that are beyond conventional technology.
- Describe the contributions and applications of Artificial Intelligence.
- Explain the role of Artificial Intelligence agents and how they relate to the environment, including the ways to evaluate how agents act by establishing goals.
- Understand the fundamentals of knowledge representation, reasoning techniques, and know how to build simple knowledge-based systems.
- Understand the basics of some of the more advanced topics of Artificial Intelligence such as machine learning, deep learning, agents and robotics.
- Understand the basic concepts and basic approaches to syntax and semantics in natural language processing.
- Define what are rule-based systems and fuzzy expert systems.
- Understand the fundamental issues of machine learning approaches, and challenges of machine learning and model complexity
- Be familiar with some of the basic learning techniques.
- Understand the basic of a fundamental knowledge of deep learning
- methodology.
- Discuss the history, concepts and key components of robots.
- Understand the role of Artificial Intelligence to analyse “big data”.
- Explain the basics of Artificial Intelligence platforms and how they are used.

WHAT ARE THE BENEFITS OF THIS MODULE?

- Explains the role of Artificial Intelligence (AI) and how to identify systems using AI. This certification provides an overview of the fundamentals of Artificial Intelligence and how to apply them.
- Certifies best practice in Artificial Intelligence.
- Developed with input from computer users, subject matter experts, and practising computer professionals from all over the world. This process ensures the relevance and range of module content.

HOW DO I GET STARTED?

To find out more about this certification, please visit
https://icdlarabia.org/modules-artificial-intelligence
To locate your nearest accredited test centre, please visit
https://icdlarabia.org/test-centres-near-you

SYLLABUS OUTLINE

CATEGORY	SKILL SET
Concepts of Artificial Intelligence	• Introduction to Artificial Intelligence • Basic concepts of Artificial Intelligence • Agents and Environments
Expert and Fuzzy Logic Systems	• Introduction to Expert and Fuzzy Logic Systems • Fundamentals of Expert System • Concepts of Fuzzy Logic system
Natural Language Processing	• Understand Natural Language Processing
Concepts of Virtual Agents	• Key elements of virtual agents • Machine learning categories • How machine learning works.
Artificial Neural Networks (ANN) & deep learning	• Introduction to artificial neural networks • Basic concepts of artificial neural networks • The essentials of deep learning
Robotic Process Automation	• Key concepts of robotic process automation • How robot’s work. • Robotics in life
Fundamentals of Big Data Analytics	• Basic issues of big data • Big data analytics tools
Artificial Intelligence Platforms	• An overview of platform types