

## On line-Training Corso Intelligenza Artificiale Transizione 5.0 con attestazione finale superamento esame. (IT5P-AI-IND)

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### Short Description

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The ongoing technological transformation driven by Artificial Intelligence (AI) has made obsolete techniques that were considered cutting-edge only ten years ago and offers new opportunities to optimize production processes. In many companies it is physiological that professionals are not fully aware of new technologies and their possible applications in their respective sectors. This fact underlines the importance of having figures specialized in Artificial Intelligence, able to offer targeted consultancy and effectively guide digital transformation within companies. Furthermore, the introduction of these technologies requires entrepreneurs, directors and business leaders to broaden their skills in order to manage AI projects effectively. It is essential that all these figures have an understanding of AI to identify possible applications in their business context, fully understand its potential and limitations, and collaborate efficiently. The course includes a final examination with a certificate of achievement

### Objectives

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The aim of the course is to provide a knowledge base on Artificial Intelligence, focusing on its applications and use cases, with attention to recent developments in the field.

Furthermore, it aims to guide participants in the analysis of AI solutions in the industrial context, through the exposure of case studies and reflection on their advantages and disadvantages.

At the end of the course, participants will be able to identify potential applications of AI in the industrial sector and collaborate transversally for the success of related projects.

### Target Group

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- Entrepreneurs
- Managers
- Directors and front lines
- Plant manager
- Production managers
- Process engineers and technical managers

### Content

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#### Introduction:

- Development of AI in recent years
- Generative models (Text, images, etc.) – e.g. ChatGPT
- Current Panorama (Big Data, Cloud Computing, Industrial IoT, Additive Manufacturing, ...)

#### Artificial Intelligence:

- Current implementations
- Intangible Asset: Data
- Payback: times and expectations

#### Artificial intelligence and society:

- European regulations
- AI solutions as innovation and Impact on society and industry

#### Machine Learning:

- Introduction to Machine Learning
- Main Definitions
- Classification: Supervised, Unsupervised and Reinforcement Learning
- Main Algorithms: Linear Regression, Decision Trees, Hierarchical clustering, ...
- Examples

#### Case Studies, Inspection and quality control:

- Computer Vision
- Object Detection
- Anomaly Detection

#### Case studies, Automation and control systems:

- Smart production lines
- Analysis of production data and
- Time Series Analysis & Demand Forecasting
- Control rings

#### Analysis of solutions:

- Evaluation of an AI project
- Advantages of innovating vs using established technologies
- Discussion

### Prerequisites

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It does not require knowledge of mathematics or programming.

**Note**

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IMPLEMENTING DECREE AUGUST 2024 :  
Transition 5.0: Trailed Expenditure  
Digital transition B.1-B.4

**Type**

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Online-Training

**Duration**

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6.3 hours

**Language**

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