

# Industry Revolution 4.0 (IR 4.0)

### **Duration - 4 Days / 32 Hours**

#### **Program Description**

This program offers an in-depth exploration of Industry Revolution 4.0 (IR 4.0), covering its evolution and key elements.

Participants will gain insights into the hardware requirements, architecture, and technological challenges associated with IR 4.0 implementation.

The course will also address the competencies needed for effective transition to smart factories and the key drivers that facilitate this transformation.

Participants will examine practical applications of IR 4.0, including sustainable manufacturing practices and digital technologies, while analysing real-world use cases to illustrate the convergence of these concepts in modern industry.

#### **Learning Goals**

- Understand the evolution and foundational concepts of Industry Revolution 4.0.
- Identify and explain the key elements and drivers of transitioning to smart factories.
- Recognize the hardware requirements and architectural frameworks necessary for IR 4.0 implementation.
- Analyze the technological challenges faced in adopting IR 4.0 and the competencies required for successful implementation.
- Explore various applications of IR 4.0, emphasizing sustainable manufacturing and smart factory development.
- Assess real-world use cases to illustrate the practical impact and benefits of digital technologies in IR 4.0

## Course Topics

- Introduction to (Industrial Revolution 4.0) IR 4.0 and evolution
- ❖ Key elements in IR 4.0
- Hardware requirements and architecture
- The Tech challenges in implementing IR4.0
- The competences required in implementing IR4.0
- Key drivers for transitioning to a smart factory
- ❖ Applications of IR 4.0
- Aspects of sustainable Manufacturing and convergence with IR 4.0 to develop smart factories
- Use cases
- Overview on key digital technologies of IR 4.0