Applied Industry 4.0

Level 2

The **Applied Industry 4.0** certification builds on foundational digital manufacturing knowledge by focusing on advanced system integration through the Industrial Internet of Things (IIoT), MES (Manufacturing Execution Systems), data safety, and real-time data processing. Learners work with real-world automation equipment to simulate and optimize smart production processes.

Through guided lab activities, students configure web services, integrate HMI applications, and apply 3D modeling to improve production efficiency. This course strengthens key technical skills necessary to thrive in connected manufacturing environments where data flows seamlessly across systems and networks.

Industry Recognized Certification Topics

- Manufacturing Execution Systems (MES)
- Human Machine Interfaces (HMI) and Equipment Integration
- Data Safety and Secure Communication
- 3D Modeling of Industrial Systems
- RFID Tracking and Product Identification
- Network Technology and Condition Monitoring
- Smart Production System Optimization

Industry Recognized Certification Competencies

- MES Integration and Configuration
- HMI System Integration
- Data Communication and Web Services
- Data Security Awareness
- Application of 3D Modeling
- Smart Factory Optimization
- RFID and Digital Identification

Units - 6 / Labs - 5