## **Advanced Product ID**



Mastering product identification and real-time decision-making is essential for Industry 4.0 operations. This certification provides in-depth knowledge and practical skills in integrating key technologies such as RFID (Radio Frequency Identification), Vision Systems, and automated decision-making into modern industrial environments. Participants will actively engage with RFID Tags, Readers, and Writers to understand how to track and manage products through various stages of an automated workflow. Additionally, they will learn to utilize Vision Systems for scanning QR codes and barcodes, enhancing the precision and speed of product tracking, sorting, and quality control. By exploring these technologies, learners gain hands-on experience in programming, integrating, and troubleshooting advanced Product ID systems. This certification equips participants with the necessary skills to enhance efficiency, accuracy, and data-driven decision-making in real-world smart factory applications, ensuring they are well-prepared to meet the demands of modern automated industries.

## **Industry Recognized Certification Topics**

- Product Identification
- RFID Technologies
- Vision Systems
- Computer Codes
- Numbering Systems

Units - 6 / Labs - 8

## **Industry Recognized Certification Competencies**

- Determine Optimal Product ID Devices
- Understand Product ID Elements
- Set and Optimize Inspection Goals
- Minimize Inspection Time
- Identify Features or Defects
- Configure RFID Frequencies
- Integrate Various Barcode Types
- Data Analytics & Optimization
- ${\mathord{\text{--}}}$  Integration with IIoT Systems
- Multi-Technology Tracking
- Advanced Data Communication
- Cybersecurity in Product ID
- Remote Monitoring & Control
- Customizing Solutions for Industry Needs

