

Level 3: Industry 4.0

Product Identification

In our goal to maximize learning success and productivity, the Advanced Product Identification is a key component in understanding the Factory of the Future, what has also come to be referred to as the 'Smart Factory'. This course covers and expands upon advanced technology such as Nearfield Technology, Barcoding, RFID, and Vision Technology. This balanced learning system is designed to impart the student with an advanced level understanding of modern product identification technologies as it is used throughout industry, the production life cycle, the manufacturing process, and even as part of the logistics and quality control process. This course blends the theoretical knowledge with hands-on exercises, labs, and activities using our CP (Cyber Physical) line of products.

Course Topics

- Binary Identification
- Auto Identification methods
- RFID II
- Transponder types
- Standards
- Electrical connections and diagnostics on the component
- Limit distance and installation guidelines
- Default modus
- IO-Link

Core Competencies

- Ability to initialize carriers with external device
- Ability to design and projects workplan for two modules
- Ability to design and projects workplan for more modules
- Ability to design and projects workplan for all modules
- Ability for troubleshooting in product identification
- Ability to integrate fault codes

Equipment

Learning Factories and Labs Solutions

Festo's CP Lab and Factory solutions have multiple product ID technologies that are utilized throughout the system:

- RFID Tags for storing data about the product
- RFID Readers
- RFID Writers
- QR Codes
- Barcodes
- Vision Systems

