

Certified Industry 4.0 Technician – Applied



Students who pass the Certified Industry 4.0 Technician – Applied comprehensive knowledge exam students will be skilled technicians who are able to assess and analyze the system as a whole. They can manage, investigate, repair and troubleshoot I4.0 systems to maximize operation and process control. They understand how individual components interact with each other to make the whole system run efficiently. To be eligible for the Certified Industry 4.0 Technician – Applied comprehensive knowledge exam students must complete the Industry 4.0 Associate - Fundamentals and all Level 2 Certifications listed as prerequisites.

Prerequisite Certifications

- Industry 4.0 Associate - Fundamentals
- Applied Industry 4.0
- Applied of Fluid Power
- Applied Mechanical Systems
- Applied PLCs
- Applied Robotics
- Applied Product ID Fundamentals

Core Competencies

- Set up, commission and systematically troubleshoot complex electro-pneumatic systems
- Calculate cost to generate and use compressed air and identify system inefficiencies for correction
- Understand, describe, implement, and maintain vacuum systems
- Understand and Utilize CoDeSys for programming and troubleshooting
- Modify a current PLC program and integrate HMI (Human-Machine Interface) Applications
- Describe and explain the function of RFID, Barcodes/QR Codes, and Vision Systems
- Program and edit complex robot applications, incorporating sensors and other automated elements
- Understand and incorporate critical safety measures, such as machine guarding, for robotic systems
- Understand and explain basic networking fundamentals
- Define and configure Manufacturing Execution System (MES) and related functionality
- Utilize web services/email push delivery and explain the importance of data security
- Explain how 3D Modeling of systems impacts production systems

School Requirement

- Must meet all equipment requirements to teach all Level 1 & 2 Certifications
- Must have an NC3 certified instructor for each Level 1 & 2 Certification
- Must be a Leadership School which requires NC3 membership

