

Certified Industry 4.0 Associate – Fundamentals



Students who pass the Certified Industry 4.0 Associate – Fundamentals comprehensive knowledge exam will be well-rounded machine operators/technicians, with responsibility for efficient operation of the equipment. They will ensure that the system is running at maximum capacity with an understanding of the role of each component and device. They can identify malfunctions and make minor repairs. To be eligible for the Certified Industry 4.0 Associate – Fundamentals comprehensive knowledge exam students must complete all other Level 1 Certifications listed as prerequisites.

Prerequisite Certifications

- Fundamentals of Industry 4.0
- Fundamentals of Fluid Power - Hydraulics
- Fundamentals of Fluid Power – Pneumatics
- Fundamentals of Electricity – DC
- Fundamentals of Electricity – AC
- Fundamentals of Mechanical Systems
- Fundamentals of Sensor Technology
- Fundamentals of PLCs
- Fundamentals of Robotics

Core Competencies

- Understand and implement safe operation and maintenance of machines and processes
- Troubleshoot, address common issues in electromechanical systems
- Perform routine maintenance activities
- Read and interpret schematics, blueprints, and technical drawings
- Operate and maintain fluid power systems
- Effectively work in a team environment and communicate clearly and efficiently with direct and indirect colleagues
- Perform basic robot programming and operation
- Identify and explain the components/ functions of a PLC and perform basic PLC programming
- Describe the function of various sensors and select the correct sensors for different applications
- Understand and explain the basic concepts and terms of Industry 4.0 and how digitalization is impacting the industry, our daily lives, and cyber-security

School Requirement

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

