

## Smart Manufacturing Program

Smart Manufacturing Workforce Certificate offered by Case Western Reserve University and TechSolve, Inc.

### **Abstract**

This training event offers an opportunity for the attendants to keep up to-date with the latest innovations, best practice and new technology solutions associated with Smart Manufacturing. Attendees will learn from and interact with speakers on sessions that focus on advanced machining of aerospace alloys, adopting collaborative robots to cut costs and increase productivity, leveraging machine connectivity and IIoT to extract manufacturing intelligence, and the latest cybersecurity regulations and mitigation strategies that must be considered to protect your company and employees. A Smart Manufacturing Workforce Certificate will be offered by the organizers of the event, Case Western Reserve University and TechSolve, Inc., at the completion of the program.

### **Agenda**

#### **1) Introductions (0.5 h)**

- a. BCI Introduction
- b. CWRU Introductions
- c. Program Introduction
- d. Audience Introductions (name, title, company)

#### **2) Machining of aerospace alloys with focus on surface integrity (1 h)**

#### **3) Adopting collaborative robots to cut costs and increase productivity – with demo (1.5 h)**

### **LUNCH BREAK**

#### **4) Creating Manufacturing Intelligence with IIoT (2 h)**

#### **5) Cybersecurity for the Digital Manufacturing Supply Chain (1h)**

## Learning Objectives

- Improve decision-making skills in smart manufacturing opportunities
- Learn advanced concepts and considerations associated with machinability and surface integrity of aerospace alloys
- Learn about trends, challenges and benefits associated with adoption of collaborative robots
- Understand how machine connectivity and IIoT enable manufacturing intelligence and process optimization and control
- Learn about the main elements of an IIoT system and considerations for IIoT implementation
- Learn about latest cybersecurity regulations with respect to NIST cybersecurity framework and Cybersecurity Maturity Model Certification (CMMC)
- Understand OT versus IT cybersecurity considerations
- Attend live demonstrations to see technology in action