SMART MANUFACTURING

PROFESSIONAL DEVELOPMENT

SAFER, FASTER, MORE EFFICIENT MANUFACTURING WITH SMART MANUFACTURING

Manufacturing is quickly evolving and now requires new knowledge and skills. Technologies such as digital security, robotics, IIOT solutions, and 5G networks and infrastructure are changing the industry and the way manufacturers work, creating demand for workers who are skilled in these advanced technologies. Forward-thinking manufacturers are investing in training programs to build the Industry 4.0 capabilities needed to remain competitive

FLEXIBLE AND CONVENIENT

Online classes are self-paced, typically taking 60 minutes to complete. They are easily and conveniently accessible on desktops and laptops, and on tablets and phones with the Tooling U-SME app.

Online Training offers:

- Content developed by industry experts
- Accessible anytime, anywhere
- Self-paced
- Predefined curriculum for each job role
- Engaging and interactive content
- Pre- and post-training knowledge assessments
- Access to Tooling U-SME's Learning Management System (LMS)
- Guidance from our Client Success team, including advice, insights, and ideas built on best practices and years of experience

EFFECTIVE COMBINATION OF CLASSES

This Smart Manufacturing training program offers a comprehensive overview of the competencies needed to take advantage of the smart manufacturing technologies that are driving the industry forward. This series includes the following classes:

ADDITIVE MANUFACTURING

Introduction to Additive Manufacturing
Additive Manufacturing Safety
The Basic Additive Manufacturing Process
Additive Manufacturing Methods and Materials
Introduction to Hybrid Manufacturing
Rapid Prototyping
Additive Manufacturing: Prototype to Production
Design for Additive Manufacturing
Additive Manufacturing Materials Science
Integrating Additive Manufacturing with Traditional Manufacturing
Additive Manufacturing as a Secondary Process

Nondestructive Testing for Additive Manufacturing
The Additive Manufacturing Supply Chain
Managing the Additive Manufacturing Supply Chain
Hybrid Manufacturing with Directed Energy Deposition
Design for Fused Deposition Modeling
Design for Directed Energy Deposition
Design for Binder Jetting

INDUSTRIAL INTERNET OF THINGS

Cybersecurity for Manufacturing Basics
Cybersecurity for Manufacturing: Malware Overview
Introduction to the Industrial Internet of Things

Data Collection Fundamentals
Automatic Identification Technology
Cybersecurity for Manufacturing: Hacking Overview
Cybersecurity for Manufacturing: Wireless Networks
Introduction to Digital Networks
Data Collection: Inventory and Maintenance
Introduction to Digital Twin
Introduction to Digital Thread
Introduction to Machine Learning and Artificial Intelligence
Machine Learning and Artificial Intelligence Applications

ROBOTICS

Robot Components

Applications for Robots
Automated Systems and Control
Robot Axes
Robot Maintenance
Introduction to Robotics
Robot Safety
Robotic Drives, Hardware, and Components
End Effectors
Robot Installations
Robotic Control Systems
Industrial Network Integration
Introduction to Collaborative Robots
Robot Sensors
Vision Systems
Robot Troubleshooting
Concepts of Robot Programming

— New content is always being added. Check with your representative for the most current list of classes. —

To begin your training program or for more information, call DVIRC at **215-464-8550** or email **info@dvirc.org**