AMATROL

Industry 4.0 Fundamentals (I4F)

Course 1

Introduction to Mechatronics

38 Lessons

Topics Include:

- Introduction to Industry 4.0
- Safety
- Hand Tools
- Measurement
- Print Reading
- Precision Measurement
- Mechanical Drives
- Fluid Power
- AC/DC Electricity
- Electrical Relay Control
- Robotics Programming
- Electronic Sensors

Course 2

Introduction to Industrial Control Systems

33 Lessons

Topics Include:

- Industry 4.0 Principles
- Mechanical Drives
- Hydraulics Fluid Power
- Pneumatics
- Robotics Programming
- Electrical Relay Control
- Electronic Sensors
- Ethernet Network Communications
- Programmable Controllers
- CNC Programming
- Mechatronic Systems

Course 3

Robot Operation & Programming

Topics Include:

- Robotic Safety & Components
- Frames
- Program Development
- Inputs, Outputs, and Macros

And More!

Certified Production Technician

Topics Include:

- Safety
- Quality Practices & Measurement
- Manufacturing Processes & Production
- Maintenance Awareness

And More!

Course 4

Introduction to Industrial Internet of Things

28 Lessons

Topics Include:

- Advanced Programmable Controllers
- Data Analytics 1
- Variable Frequency Drives
- Bar Code Production Identification
- Mechatronics: Motors & Conveyors
- Ethernet Network 2
- RFID Product Identification
- Smart Sensors
- Programmable Controllers
- System Optimization
- Mechatronics: Communication & ASRS
- PLC Troubleshooting