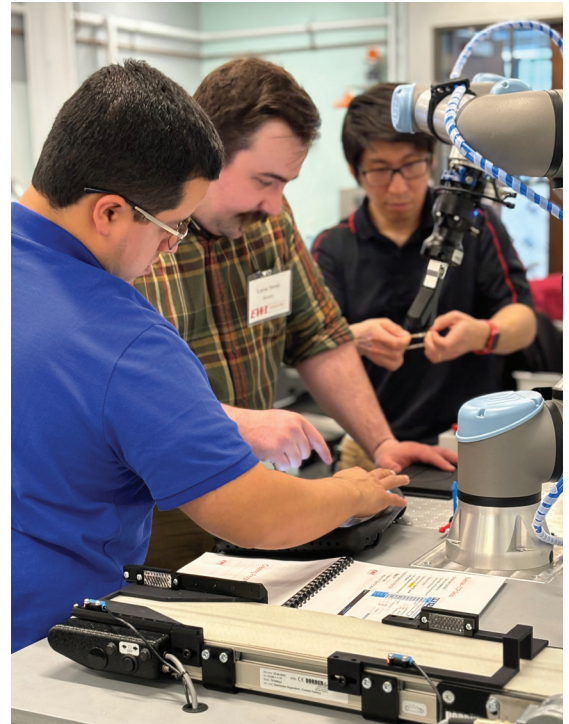# Robotic Integration: Hybrid Course Format
Online plus three-days of in-person instruction (Buffalo, NY)

EWI is pleased to now offer a **hybrid Robotic Integration** course which gives students the same in-depth coverage as our standard Robotic Integration course with less disruption to their work schedule. Students are able to learn robotic integration principles online in advance of the in-person portion of the class. The self-study segment is followed by three days of in-person instruction in the automation labs at EWI's Buffalo Manufacturing Works, where students focus solely on hands-on work.

The course covers robotic selection, operation, and setup; safety considerations; electrical and pneumatic interfacing; basic and intermediate programming; and applications-based programming including pick-and-place, machine tending, palletizing, and continuous path operation.

Robotic Integration: Hybrid Course Format offers 35 professional development hours (PDH) upon completion of the course. For additional information, contact Susan Witt, Manager of Industrial Training, at **switt@ewi.org** or 716.710.5538.

Robotic Integration: Hybrid Course Outline

Online/Self-Study	– Technology Overview – Robot Safety – Pneumatics – Robotic Peripherals – Circuit and Schematic Interpretation	Students receive access to the online content three weeks before the start of the the in-person practicum. This portion of the course can be completed at their own pace in the weeks leading up to the segment at EWI's Buffalo Manufacturing Works.
Day 1:	– Online Review – Jog – TCP – Programming	The in-person class starts with a quick review of online content, then moves into how to jog and set TCP on the robots, followed by basic path programming.
Day 2:	– Robotic Applications – I/O – Palatalizing – Force Control Basics	Day Two focuses on robotic applications, such as how to access, control and monitor the I/O on both of the robots. Students also learn pneumatics to create pick and place programs and vacuum for palatalizing programs.
Day 3:	– Electrical Wiring – Trouble Shooting – PLC/Modbus – Machine Tending	The hands-on segment wraps up with basic ladder logic programming for PLCs and Modbus. Students will also learn a basic dual gripper machine tending program.

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