



## EPISODE 21: SHOW NOTES AND ACTION ITEMS

In today's interview you heard Dave Vasko, Director of Advanced Technology at Rockwell Automation. He is charged with developing and managing technology to enable the future generation of the company's industrial automation products. He mentioned the importance of AI and the free online course, Elements of AI, from the University of Helsinki, <https://www.elementsofai.com/> This could be a great starting point for faculty members to get up to speed. A second professional development opportunity would be to explore Rockwell's dynamic digital twin software, <https://www.demo3d.com/>.

Dave also mentioned their Academy of Advanced Manufacturing, <https://www.rockwellautomation.com/en-us/capabilities/academy-advanced-manufacturing.html> . The 12-week academy provides U.S. military veterans with the upskilling they need to succeed in advanced manufacturing roles. This veteran training program not only helps bridge the manufacturing skills gap, but it also provides post-training jobs. This is a good model for other industry sectors and it complements the Veterans' initiatives at many community colleges.

Graduates of the Academy of Advanced Manufacturing, Instrumentation & Automation Control Technician program will be certified by Rockwell Automation to be capable of successful execution of the following:

- Interpreting wiring diagrams used in an Industrial Automation and Control System (IACS)
- Describing, understanding, and troubleshooting the various factory floor electro-mechanical components in an IACS such as fuses, relays, contactors, digital and analog inputs and outputs and common instrumentation devices
- Operate, support and troubleshoot small and medium-scope Programmable Logic Controllers, and supporting projects associated with those controllers
- Troubleshooting ladder-logic based Programmable Logic Controllers
- Designing, programming, and troubleshooting plant floor Human Machine Interfaces (HMI)

- Tracing operational data from plant floor electro-mechanical devices to the controller, HMI within an IACS
- Performing a preventive maintenance schedule on plant floor equipment
- Starting-up, maintaining, and troubleshooting low voltage variable frequency drives, with power ranging from 1 HP to 300+ HP
- Troubleshooting layer 1 and layer 2 networking components within an industrial Ethernet environment

Your action for today is to examine your programs and update your list of top things—aim for ten—that program graduates will be capable of “successfully executing.” Make sure you use industry-speak in your language.

Finally check out Dave’s podcast, State of the Industry: Your Guide to the Future of Smart Manufacturing, <https://podcasts.apple.com/us/podcast/state-industry-your-guide-to-future-smart-manufacturing/id1387868132>