Axis New England - Factory optimization with Flexible Robotics
(16 Hours)

TRAINING DESCRIPTION:
Participants will be introduced to the process of deploying a collaborative robot in a hands-on environment with real tools that are used in factories across the country. Collaborative robots are a technology that combines the power of traditional automation with revolutionary safety algorithms that allow them to work alongside people on the plant floor. New-age ease of programming alongside safety allows for high flexibility in deployment, meaning your robot doesn't need to stay bolted to the floor.

TRAINING OBJECTIVE:
The goal of this training is to arm students with the knowledge to identify applications in their factory which are a good fit for collaborative robots, and to provide them with the basic skills to get started using cobots on the plant floor.

SKILL ATTAINMENT:
- Identify good fit applications for cobots, and learn which types are best suited for DIY and which require an integrator partner.
- Learn the theory behind teaching a robot a new task
- Get hands-on experience programming a robot to do several tasks, such as pick-and-place, palletizing, vision guidance and force-based insertion.
- Familiarity with a variety of tooling options that fit with the robot, to enable different kinds of applications.
- Review safety concepts and learn how cobots can be deployed in uncaged environments
- Learn successful application deployments, and how ROI is calculated

TRAINING CONTENT:
An Automation Engineer from Axis New England will visit the manufacturer's site to review possible application fits, and advise on proceeding with a pilot project. The Engineer will tour the facility with the interested parties, asking and answering questions to determine which application would be the best place to start for an automation initiative. The Engineer will collect samples, prints, and details on the application, for the internal evaluation.

The teams will come back together (either at the manufacturer's site or at Axis New England) to review the proposal on an initial application presented by the Automation Engineer from Axis NE. They will review details on:
- Robot selection
- Tooling recommendation
- Mounting
- Machine interface
- Parts presentation
- Video and/or pictures of concepts or demonstrations of the robot performing the same or similar task
- Financial justification ROI for the project
- Next steps