

ERIE 1 BOCES WORKFORCE DEVELOPMENT NOW OFFERS TRAINING IN ROBOTICS



Introduction to Robotics & Robotic Operations



Course 1: Introduction to Robotics

Industrial Robots are no longer limited to use by large manufacturing companies. Today's robots cost less, are more efficient, agile, easier to program and intelligent. This has led to their use in an ever increasing number of applications including material handling, welding, painting, machine tending, assembly and inspection.

The widespread use of robots has created a need for experienced robotic technicians to install, program maintain and troubleshoot robots. This course covers the different types and characteristics of industrial robots and their controllers with an emphasis on robot safety. You will obtain practical experience working with an ABB IRB-120 industrial robot. **Prerequisites: Industrial electricity and Programmable Logic Controllers.**

- Human & Industrial Robot safety
- Fundamentals of Robotic systems
- Applications of Robots
- Sensors
- Power systems
- Controllers
- End effectors & tooling

Course 2: Robotic Operations

This course is a continuation of the Introduction to Robotics course. You will learn about the importance of performing maintenance procedures on robot components and keeping a maintenance log. The troubleshooting component teaches you how to use diagnostic software and other resources to identify common robot problems and perform repair procedures to minimize downtime.

You will use ABB "Robot Studio" software to program the IRB-120 industrial robot to perform a variety of tasks. Advanced topics including robot vision systems, autonomous robots and artificial intelligence (AI) will be introduced. **Prerequisites: Introduction to Robotics.**

Troubleshooting robot systems

- Safety concerns when troubleshooting
- Maintenance procedures
- Pneumatic, hydraulic and electrical testing
- ABB Robot Studio
- Vision systems and autonomous robots
- Programming jobs



Call 821-7500 for More Information