US460
ABB Integrated Vision

The goal of this course is to teach the students how to use the ABB Integrated Vision hardware and software for use with IRC5 controllers. This class will cover everything that the general user would need to know.

Topics include:

- ABB Integrated Vision Overview
- ABB Integrated Vision Installation
- Basic Lighting and Optics
- Getting Started
- Calibrate Camera and Robot
- Find It
- Programming the Robot
- Error Handling
- Multiple Targets

- Distinguishing Between Parts
- Check it
- Track It
- The Flex Pendant Interface
- Using the Film Strip
- Backup and Restore Vision Information
- Changing Image Parameters on the Fly
- Parallax Compensation
- Virtual Robot, Real Camera

Course objectives: After successfully completing the course, the participant should be able to:

- Describe ABB Integrated Vision components
- Install and setup ABB Integrated Vision Components
- Describe common vision applications
- Describe the fundamentals of lighting and optics
- Use RobotStudio's Integrated Vision Software
- Calibrate a camera
- Train a part for location

- Perform part inspection
- Perform code reading
- Output results to RAPID
- Create RAPID program using Vision results
- Use Flexpendant interface
- Trouble shoot common vision problems

Student profile: This course is intended for

- Engineering personnel that are interested in ABB Robot Vision.
- Those responsible for programming and maintaining ABB Robot Vision.

Prerequisites:

- IRC5 Programming I (US420)
   OR IRC5 Programming I for Integrators (US426)
   OR IRC5 Programming I for Welding (US490)
   OR IRC5 Programming I for Spot Welding (US491)
   . . .within the last 12 months
- Working knowledge of RobotStudio is helpful

Duration: 4½ days