

## US383

# IRB 5402 Mechanical Maintenance with Process Arm

The course is designed to teach students the theory of operation, disassemble and reassemble the vertical arm, horizontal arm, horizontal arm drive unit, drive shafts, spring assembly, and motors. Additionally, how and when to PM the robot, fluid control, process arm components, and troubleshooting. When applicable, disassemble and reassemble the gear pumps and valve pack.

### Topics include

- Proper safety precautions used while performing mechanical repair
- Operation of robot control and mechanical unit
- Description and operation of mechanical components
- Overview of paint process arm components
- How to use manual for repair and ordering of spare parts

### Course objectives

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

- Perform safety precautions used while doing mechanical repair
- Properly start-up, operate, and shutdown the robot
- Describe the operation of mechanical components
- Disassemble and reassemble mechanical unit
- Use the manual for repair and ordering of spare parts
- Identify and describe the paint process components
- Overview the 2x2 valves
- Overview of paint process arm preventive maintenance procedures
- Perform preventive maintenance procedures on the robot



### Student profile

- Industrial personnel required to mechanically repair the robots and to perform regular preventive maintenance

### Prerequisites

- Mechanical background or experience is helpful
- Ability to navigate through the Teach Pendant

### Course duration

The course duration is 4.5 days.

### Customer Service – Robotics

1250 Brown Road

Auburn Hills, MI 48326, USA

Tel: 1 800 HELP 365 (1 800 435 7365) option 1, option 4

Outside USA/Canada: +1 440 585 7804

Fax: +1 440 585 5087

E-mail: [abbuniversity@us.abb.com](mailto:abbuniversity@us.abb.com)

[www.abb.us/abbuniversity](http://www.abb.us/abbuniversity)

© 2010 ABB Inc. 3BUS095328 SM2010-027

ABB reserves the right to change specifications without notice.