ABB Course Description

US358
S4P Electrical Service

This class is designed to teach students how to identify the electrical components, theory of operation, and proper troubleshooting procedures. Approximately 40% of the course is hands-on troubleshooting of actual robot systems.

Topics include
- Operation of robot control and mechanical unit
- Safety precautions used while troubleshooting electrical system
- Description of components in the robot controller
- Principles of logical troubleshooting from power up, through emergency stop loop and servo system
- Input/output interfacing between robot controller and peripheral equipment
- How to properly setup and troubleshoot the purging system

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

- Practice all areas of safety as they pertain to the robot system
- Properly start-up, operate and shutdown the system
- Properly identify and recover from robot errors
- Identify different parts of the robot control and arm
- Troubleshoot computer and drive cards
- Troubleshoot the entire electrical system
- Load system software and system operating parameters
- Interface an input and an output device to the robot control
- Troubleshoot the purging system

Student profile
- Industrial electricians
- Electrical service technicians
- Engineers
- Supervisory personnel

Prerequisites
- Familiarity with use of electronic test equipment (voltmeter)
- Basic understanding of digital electronics is helpful
- Basic robot programming class US340 is recommended

Duration
The course duration is 4.5 days.

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