

ABB UNIVERSITY COURSE DESCRIPTION

# **US616**

# DCS800 Multidrive Operation and Maintenance



Learn basic start-up, programming, and troubleshooting skills as they apply to DCS800 MultiDrive digital converters.

### Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

### **Student Profile**

This training is Ideal for system E/I technicians seeking to develop maintenance and troubleshooting skills necessary for DCS800 digital converter drive system applications.

#### **Prerequisites**

Students should know the fundamentals of working with DC converter drives and a basic knowledge of the Microsoft Windows® operating system.

## **Course objectives**

Upon completion of this course the participants will be able to:

- · DC drive fundamentals
- DC converter control and operation principles
- · Identify and replace Converter unit hardware
- Working knowledge of the Converter unit software and be able to modify parameters
- Modify parameters using the DCS800 control panel

- Perform a start-up using the Driveware tools and the control panel
- Interpret fault and alarm messages, and parameter group descriptions using the system firmware manual
- Modify parameters using the Driveware tools, Drive Window and Drive Window Light
- Monitor, trend, and collect historical data using the Driveware tools
- Set up a small application with the Drive Window Light AP program
- Fault tracing, troubleshooting and replacing cards and components
- PROFIBUS Communications
- · Basic speed loop control tuning
- Drive service, maintenance and troubleshooting procedures

#### **Duration**

The duration is 4 days

Day 1	Day 2	Day 3	Day 4
Course overview	DCS800 hardware	• Drive Window Light Adaptive	Drive Window presentation
DC drives Ladenburg,	<ul> <li>Drive Window Light</li> </ul>	Programming presentation	Drive Window lab exercise
Germany	presentation	• Drive Window Light Adaptive	Drive Window
DC drive basics	• Drive Window Light exercise	Programming exercise	commissioning exercise
DCS800 introduction	• DCS800 12 Pulse	<ul> <li>PROFIBUS communication</li> </ul>	Drive Window tuning
DCS800 control panel		Customer lab exercise	exercise
DCS800 control panel			Drive service, maintenance
exercise			and troubleshooting