

ABB UNIVERSITY COURSE DESCRIPTION

# A331

# Advant Controller 400 Configuration and Operation



Learn to operate and configure the Advant Controller 400 with local and/or remote I/O, and write control programs in the ABB MasterPiece Language.

## Course type and methods

This is an instructor led workshop with short presentations and demonstrations, extended exercises, hands-on sessions and discussion.

### **Student Profile**

This course is targeted to system, process, application, instrumentation, electrical, or service engineer.

#### **Prerequisites**

Participants should have basic knowledge of logic diagrams and how processes are controlled.

#### **Course objectives**

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

- Program Advant Controller using Advant station 100 series Engineering Stations (also applicable to the Online Builder option for the Advant 500 Operator Station)
- Use equipment in normal operation

#### **Main Topics**

- · Advant OCS philosophy and products
- Block selection (PC-elements)
- ABB MasterPiece Language (AMPL) programming methods
- · How to define, dimension, and populate a database
- On-line Builder software (PC programming, dumping, loading and parameter adjustment)
- Introduction to AdvaBuild Function Chart Builder (FCB)

#### Duration

The duration is 5 days

Day 1	Day 2	Day 3	Day 4	Day 5
<ul> <li>Course information</li> <li>Training equipment presentation</li> <li>Signal flow, hardwaresoftware</li> <li>Advant Station 100 Engineering Station</li> <li>Database handling</li> </ul>	<ul> <li>PC program structure</li> <li>Monitoring and testing of application programs</li> <li>Operation of the process controller and PC programs</li> <li>Design of PC program, online</li> </ul>	On-line documentation Back-up and transfer of application Application with sequence e	<ul> <li>Sequence programs in an operator station</li> <li>DAT communication between PC programs</li> <li>Data set communication between controllers</li> <li>AC400 series and \$800 I/O database configuration</li> </ul>	Program handling     Object control using functional units