

CURRICULUM DESCRIPTION

Drive Specialist

Tuition Fee

Tuition is free (\$0) for authorized distributor Channel Partners.

Description

This program is designed to provide students with the technical expertise to support and promote sales of ABB Low Voltage Drives. The Drive Specialist training focuses on machinery, pump/fan, and other light industrial drive applications. Products covered in this class are the ACS310, ACS355, ACS380, and ACS580. The program is also one of the prerequisites to the Drive Expert program.

Training Type and Duration

The instructor-led portion of the program spans 4.5 days and includes numerous hands-on lab exercises. The Drive Specialist program contains a Pre-Assessment exam that must be completed before attending the instructor-led class to determine student aptitude.

Student Profile

The student must be an employee of an ABB authorized distributor, responsible for pre-sales support or technical sales of LV drives products. Students must also bring their personal computer.

Training location and scheduling

The instructor-led class is offered at our New Berlin, WI training facility. Please visit the Drives, PLC & Motion Training Schedule for a list of upcoming classes.

Prerequisites

To register for this program, you must have completed the ACS580 Authorized Start-Up program.

Classroom Prerequisites

To reserve your seat for the instructor led class, you must have completed all e-learnings in the Drive Specialist Program.

The post-assessment exam will be completed after you have attended the classroom training

Learning Objectives

The objective of this program is to teach students the selection, packaging (solution), application, commissioning, configuration, basic troubleshooting and first level tech support of the defined drive products.

Upon successful completion of this program, students will obtain the following:

- Apply basic, safe-work practices for installation and commissioning of Low Voltage Drives
- Support sales representatives in account dissemination and customer support
- Understand the principles related to application of motors, gearing and drives
- Recognize opportunities for drive sales
- Understand required info to properly size equipment
- Provide recommendations and technical expertise in the selection of motors, gearing and drives for a customer's application
- Complete understanding of the installation requirements and best practices for application of a Low Voltage AC Drive
- Program and utilize standard software features of the drives
- Understand how to utilize PID Control in ABB Low Voltage drives, troubleshoot drive speed controller response, and properly tune a PID loop.

Expectations of a Drive Specialist

- **Sales Support (Business Growth)**
The Drive Specialist shall support the outside sales representative. Their primary role is the technical expert in selection, use and application of automation equipment.
- **After Sales Support (Customer Assistance)**
The Drive Specialist shall support the customer in the installation, commissioning and application of automation products into industrial applications.
- **Training (Sales, Customer)**
The Drive Specialist shall provide "Lunch-and-Learn" training classes for customers, technical sales training for sales teams, and product overview / technical training for inside support staff.

Student Materials

Student will receive upon completion of the instructor-led class:

- Student manual with all training materials, including practice labs

Please Note: Student presentation projects, that require a moderate amount of time (est. 2 to 6 hrs.) outside class hours, will be assigned. These must be completed and delivered in order to finish this course. Please plan accordingly to ensure you are able to handle these projects, in addition to your daily responsibilities.

Agenda

Day 1	Day 2	Day 3	Day 4	Day 5
<p>8:00 a.m. – 5:00 p.m.</p> <ul style="list-style-type: none"> • Basic applications • Application Concepts - Selecting & Sizing • AC Drive control methods • ACS380 PLC Lab • Fans and pumps for VFDs 	<p>8:00 a.m. – 5:00 p.m.</p> <p><u>Hands-on Lab Rotations</u></p> <ul style="list-style-type: none"> • Hardware troubleshooting • Energy Efficiency • Fans and pumps • Drive Composer w/ ACS580 <p>Factory Tour</p>	<p>8:00 a.m. – 5:00 p.m.</p> <ul style="list-style-type: none"> • Replacing Classic ABB Drives • Competitive Advantages • PLC / HMI / Drive - lab • Industrial fieldbus • ACS580 with Modbus comm. – lab 	<p>7:45a.m. – 5:00 p.m.</p> <p><u>Hands-on Lab Rotations</u></p> <ul style="list-style-type: none"> • PID tuning fundamentals and simulation • Fan damper control and tuning • Sequence programming for the ACS355 • Application and drive programming • System sizing 	<p>8:00 a.m. – 12:15 p.m.</p> <p><u>Student Presentations</u></p> <ul style="list-style-type: none"> • Application - project • System sizing – project <p>Industrial Applications - Review</p>