

Drive Application Specialist

Program Description

Tuition Fee - \$2850 per student

Drive Application Specialist

This program is designed to provide students with the technical expertise to support and promote sales of ABB LV Drives. The Drive Application Specialist level of training focuses on machinery, pump/fan, and other light industrial drive applications. Products covered in this class are the ACS310, ACS355 and ACS550. The US9156 program is a prerequisite to the Drive Expert program.

Student Profile

This program is intended for customers and end users with experience working with and installing LV Drives.

Program Type and Duration

This program is a 4.5 days instructor-led training class that includes hands-on lab exercises to achieve course objectives. The Drive Application Specialist program contains a Pre-Assessment exam that must be completed before attending the instructor-led class to determine student aptitude.

Program Objectives

The objective of this program is to teach students the selection, packaging (solution), application, commissioning, configuration, basic trouble-shooting, 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 LV 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 and know what information is needed to properly size equipment for the application
- 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 LV AC Drive
- Program and utilize standard software features of the drives (covered in this training)
- Understand how to utilize the macros available in the ACS550 drive. Perform basic fault diagnostics; on-site correct installation issues

Expectations of a Drive Application Specialist

- Sales Support (Business Growth)
The Drive Application 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 Application Specialist shall support the customer in the installation, commissioning and application of automation products into industrial applications.
- Training (Sales, Customer)
The Drive Application Specialist shall provide "lunch-n-learn" training classes for customers, technical sales training for sales teams, and product overview / technical training for inside support staff.

Training class locations 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.

Student Materials

Student will receive upon completion of this class:

- Student manual with all training materials including practice labs
- The Basic Guide to Installing an AC Drive

Course Prerequisites

- ACS550 Installation & Commissioning - US9151, or ACS550/800 Installation & Commissioning - US9201

(e-learning)

- General Aptitude exam (Timed Pre-Assessment)
- Mechanics 101 - training unit
- Mechanics 101 - test unit
- AC Drives 101 - training unit
- AC Drives 101 - test unit
- AC Motors 101 - training unit
- AC Motors 101 - test unit
- Machine Safety - overview
- Wiring and grounding best practices
- Arc Flash - overview to drives
- Standards and Compliance - Overview
- Enclosure types and applying drives in enclosures

Supplements and Post-Assessment

- AC Drive Control Methods 101
- Course Final Exam (Timed Post-Assessment)

Program Description

Course Agenda (classroom)

Day 1	Day 2	Day 3	Day 4	Day 5
8:00 a.m. - 5:30 p.m. <ul style="list-style-type: none"> • Drives, Motors, Mechanics - review • Basic applications • AC Drive control methods • ACS550 startup - lab • ACS550 installation, wiring & commissioning • ACS550 faults and troubleshooting • Fans and pump for VFDs 	8:00 a.m. - 5:00 p.m. <p>Hands-on lab rotations</p> <ul style="list-style-type: none"> • Hardware troubleshooting • DrivesWindows Light • Energy Efficiency • Fans and pumps 	8:00 a.m. - 5:15 p.m. <ul style="list-style-type: none"> • Cross referencing drives • Competitive Advantages • ACS550 PFC macro (multi-pump) • ACS550 PFC macro - lab • Industrial fieldbus • ACS550 with Modbus comm. - lab 	8:00a.m. - 5:00 p.m. <p>Hands-on lab rotations</p> <ul style="list-style-type: none"> • PID tuning fundamentals and simulation - lab • Fan damper control and tuning - lab • Sequence programming for the ACS355 - lab • Application and drive programming - labs • System sizing - lab 	8:00 a.m. - 12:00 p.m. <ul style="list-style-type: none"> • Application lab - student presentations • System sizing lab - student presentation • Industrial applications