

## CURRICULUM DESCRIPTION

# ACS880 Multidrives Usage & Maintenance

### Tuition Fee

Tuition is \$1250 per student.

### Description

The ACS880 Usage & Maintenance training provides customers and end user's trained technicians with the required knowledge to start-up ACS880 multidrives. The technician can perform and verify the drive is installed and configured properly for service in the application.

The course will cover safe working practices, basic troubleshooting for major drive components, and disassembly/reassembly of LV multidrives boards and fans. The ACS880 Usage & Maintenance (U&M) or DASC Training programs, for wall-mount drives, is a required prerequisite.

### Student Profile

This course is intended for customers and end users with experience working with and installing LV Multidrives. Students of this course would be responsible for installation and technical services related to maintaining LV Multidrives.

### Training Type and Duration

This course is **1.7 Days of instructor-led training class** that includes hands-on lab exercises to achieve course objectives. This course also includes approximately **4+ hours of prerequisite eLearning**.

### Prerequisites

Participants must have:

- ACS880 U&M or DASC Training (Wall-Mount Drives)
- Experience working with power electrical equipment and voltage levels of up to 690Vac
- The ability to use test equipment such as multi-meters and oscilloscopes
- Knowledge of LV AC Drive theory and operation
- An understanding of basic motor control
- Familiarity with product commissioning PC tools, and basic computer skills
- The physical ability to assist in maneuvering large-frame drive modules on wheels, up to R8i frame, which can weigh up to 275 lbs. each

### Goal

The goal of this course is to teach students to Install & Commission, adjust, maintain, and troubleshoot ACS880 Low Voltage Multidrives using available programming and troubleshooting tools. This Usage & Maintenance Training focuses heavily on air-cooled Multidrives up to 6500HP.

### Learning Objectives

Upon successful completion of this training, participants will obtain the following ...

- Apply basic safe work practices for installation and commissioning of LV Multidrives
- Understand the installation requirements for an ACS880 Multidrive
- Knowledge of safe work practices while they maintain, troubleshoot, and repair LV Multidrives
- Understanding of the risks associated with LV Multidrives
- Understanding of required maintenance associated with the upkeep of LV Multidrives
- Experience diagnosing onsite problems and correcting faults associated with LV Multidrives
- Knowledge and experience repairing & replacing faulty hardware components
- Follow ABB's Maintenance Schedule to minimize downtime and ensure peak performance from their ACS880 Multidrive

### Student Materials

Upon completion each student will receive:

- 1 set of Student Manuals with all training materials
- All necessary ACS880 hardware and firmware manuals (upon request, in PDF format)

## Training locations and scheduling

This training is accomplished using eLearning and in-person instruction. For a schedule of other training opportunities please visit the Drives, PLC, and Motion Training website at: <https://new.abb.com/service/training/abb-university/united-states/drives>.

## Course Agenda

Day 1	Day 2
<b>8 AM – 4:45 PM</b> <ul style="list-style-type: none"><li>• Course Introduction</li><li>• Multidrive Options &amp; Product Review</li><li>• ACS880 MD Mechanical Installation</li><li>• ACS880 MD Electrical Installation</li><li>• ACS880 MD Cooling Loop</li><li>• ACS880 MD Liquid Cooled Circuit Concepts</li><li>• ACS880-07 Cabinet Hardware ID Lab Exercise</li><li>• ACS880-x7 Multidrive Startup Lab</li><li>• ACS880 Multidrives Troubleshooting</li><li>• Summary</li><li>• Survey</li><li>• Class Dismissal</li></ul>	<b>8 AM – 3:00 PM</b> <ul style="list-style-type: none"><li>• Course Introduction</li><li>• Multidrives Maintenance</li><li>• ACS880-07 MD Circuit Boards</li><li>• ACS880 MD Troubleshooting</li><li>• ACS880 R8i Dis-Assembly (Lab)</li><li>• Dismissal</li></ul>

