

## Course description

# G156e

## ACS800 single cabinet built drives, fundamentals, Internet course

### Course type

Internet course

### Course Duration

The course duration is approximately 1-2 days depending on personal background knowledge and study pace. For those familiar with ACS600 products it is typically one day. This course is a prerequisite for G156 classroom course.

### Course Goal

The goal of this course is to teach students the basics of the installation, start-up, adjustment, operation, maintenance, troubleshooting and repair of ACS800-X7 single drives.

### Student Profile

This course is intended for electricians, technicians and engineers, who install, operate and service ACS800-X7 single drives.

### Prerequisites

- Basic knowledge of electronics
- Experience in using a computer and Internet browser. The recommended browser is Microsoft Internet Explorer version 5.0 or later.
- An Internet connection

### Description

This course includes self-study material, self-assessment questions and interactive exercises (e.g. operating the Assistant panel).

This course belongs to a learning path that utilizes blended learning. Please see the accompanying figure of possible learning paths.

### Course Objectives

Upon completion of this course, students will be able to:

- Describe the functions of the ACS800-X7 drive
- Describe the hardware structure of the product
- Use the functions of the control panel
- Activate and use the ACS800 software
- Describe the basics of installation, commissioning and service operations for the ACS800-X7 single drives
- Describe the basic principles of fault tracing

### Main Topics

- Overview of the ACS800-X7 features
- Hardware construction
- Component and board functions
- ACS800 standard application program
- Control panel functions
- Optional equipment overview
- Preventive maintenance
- Fault tracing principles
- Installation principles
- Basic service operations
- DriveWindow commissioning and maintenance tool operations

### Low voltage drives training

ABB University Finland, Helsinki Training Center  
Helsinki.abbuniversity@fi.abb.com  
[www.abb.com/abbuniversity](http://www.abb.com/abbuniversity)

## Course description

# G156

# ACS800-X7 single drive, start-up, maintenance and service hands-on training

## Course type

This is a classroom course with hands-on lab activities led by an instructor. Before attending to this course, the e-learning course G156e should be completed as a theory part of the training.

## Course Duration

The course duration is 1.5 days.

## Course Goal

The goal of this course is to teach students to install, start-up, adjust, operate, maintain, troubleshoot and repair ACS800-07/-17/-37 single drives.

## Student Profile

This course is intended for electricians, technicians, and engineers, who install, operate and service ACS800-07/-17/-37 single drives.

## Prerequisites

- Basic knowledge of electronics
- Experience with using a Windows PC
- Course G107e and G156e. Please refer to the accompanying figure of ACS800 single drive learning paths for course details.

## Description

This course contains hands-on exercises and fault tracing with ACS800-07 units. This course contains partly common hands-on exercises with courses G160 and G161.

This course belongs to a learning path that may utilize blended learning. Please see the accompanying figure of possible learning paths.

**Note!** This course includes partly same exercises as the courses G161 and G160.

## Course Objectives

Upon completion of this course, students will be able to:

- Commission and tune ACS800-07/-17/-37 single drives.
- Trace and correct faults
- Operate and maintain ACS800-07/-17/-37 single drives.

## Main Topics

- Hardware of ACS800-07
- Component and board functions
- Reading and interpreting circuit diagrams
- ACS800 standard application program with PROFIBUS
- IGBT replacement
- Locating and identifying terminals, boards and other components
- Converter commissioning
- Redundancy on request
- Fault tracing methods
- Regenerative drive
- DriveWindow commissioning and maintenance tool operations

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## Course agenda

# G156

# ACS800-X7 single drive, start-up, maintenance and service hands-on training

### Day 1

08:30 Course Information  
08:45 Exercise 1  
10:15 Coffee break  
10:30 Exercise 2  
12:00 Lunch  
12:45 Exercise 3  
14:15 Coffee break  
14:30 Exercise 4  
16:00 End of the day

### Day 2

08:30 Exercise 5  
10:00 Coffee break  
10:15 Fault tracing & ACS800-07 Start-up  
11:45 Lunch  
12:30 Questions & Feedback  
12:45 Factory tour (optional)  
14:00 End of the course

Exercise packages	Group 1 Exercise	Group 2 Exercise	Group 3 Exercise	Group 4 Exercise	Group 5 Exercise
Package A / H Diode supply section/ Regenerative drive	1	5	4	3	2
Package B Profibus	2	1	5	4	3
Package E IGBT replacement	3	2	1	5	4
Package C Inverter Unit	4	3	2	1	5
Package F/ H Drive Window 2.X/ Regenerative drive	5	4	3	2	1

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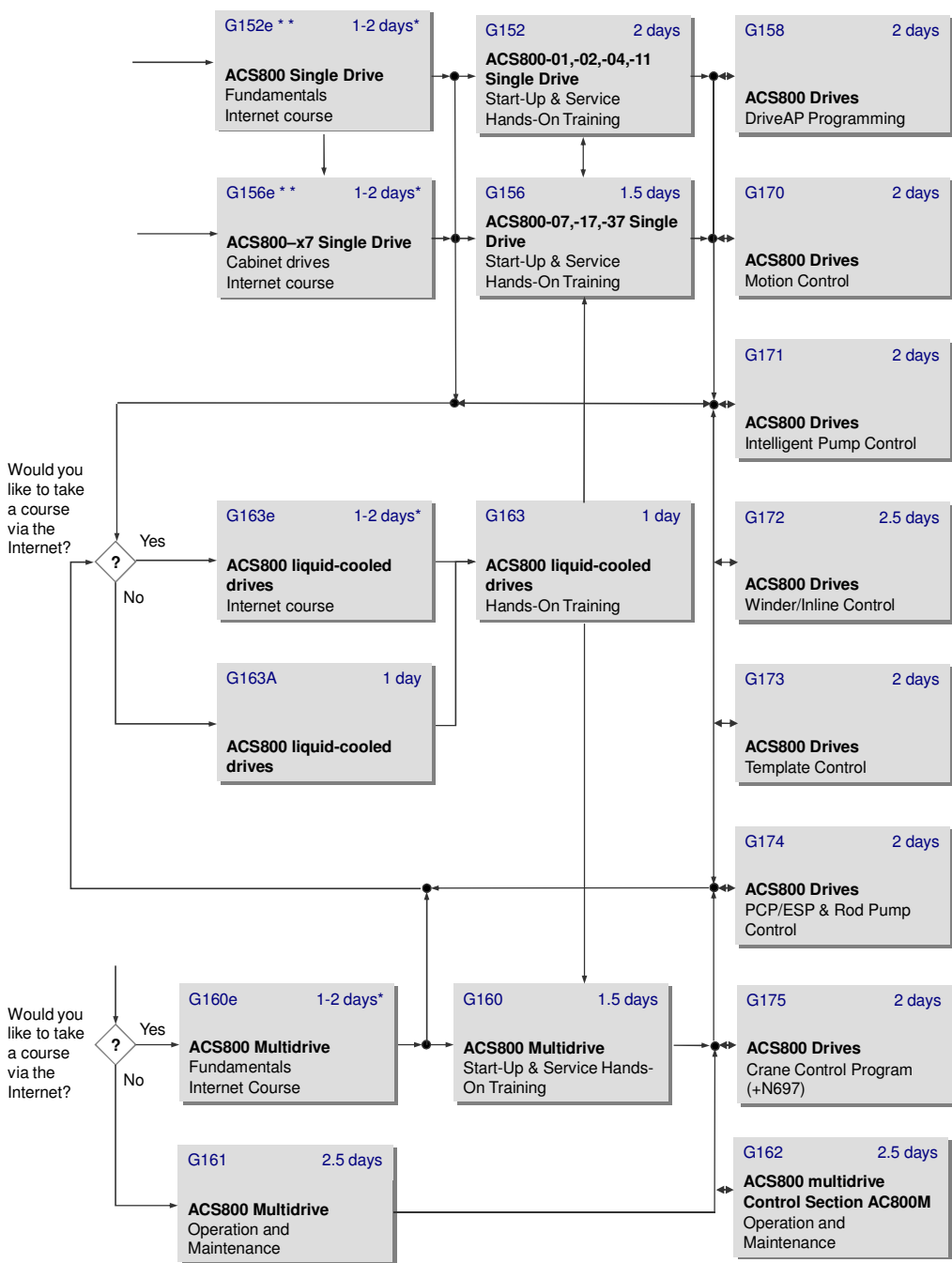
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Learning Path

# ACS800 drives Learning path

Course code	Duration
Course name	



\* The duration of the Internet courses depends on personal professional background and study pace

\*\* The course can be given in a classroom for the customers.