Course description

G340
Function chart builder (FCB) programming for advant controller AC80

Course Duration
The course duration is 3 days.

Course type
This is a classroom course with hands-on lab activities supported by an instructor.

Course Goal
The goal of this course is to teach students how to use the AdvaBuild in the AC80 system.

Student Profile
This course is intended for application programmers.

Prerequisites
- Basic knowledge of electronics
- Basic knowledge of using a computer
- Course G331. Please refer to the accompanying figure for the course name and duration.

Description
This course belongs to a learning path. Please see the accompanying figure of possible learning paths. On request, this course can also be run for APC2 (Application Controller).

Course Objectives
Upon completion of this course,

students will be able to:

- Program AC80 using the AdvaBuild program
- Test and trace faults in application programs

Main Topics
- Hardware and software requirements of the PC
- Overview of AdvaBuild programming
- AdvaBuild installation
- AC80 system software installation
- Directory structure
- Project structure in the PC software
- Building, testing and fault tracing of application programs using the FCB
- Creating, using, testing and fault tracing of type circuits
- Overview of function blocks, cycle times and programming guidelines
- System rebuild using backups
- Back-translating APC programs into the AC80
- Communication between controllers, drives, control panels and field instruments

Low voltage drives training
ABB University Finland, Helsinki Training Center
Helsinki.abbuniversity@fi.abb.com
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Course agenda

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Day 1

09:00 Welcome and introduction

09:20 System presentation: Advant Controllers in general and Advant Controller AC 80

- Exercise

09:40 Training equipment overview
- AC 80
- S800 I/O
- I/O box
- AF 100 bus

10:00 Coffee break

10:15 System structure
- Hardware
- System software packages of the AC 80
- Exercises

11:20 Installation and start-up of the FCB
- Installation
- Start-up
- Main menus

12:00 Lunch

13:00
- Project target system set-up/Directory structure
- Function Chart Builder / Working modes
- DB elements generally
- HW configuration of the AC80 by DB-elements
- Example of usage

14:00 Coffee break

14:15
- Target control
- Translate commands
- On-line editing/measuring/forcing + Exercises

16:00 End of day 1

Day 2

08:30 Project/Target maintenance Copy/Backup/Restore
- Backup with copying
- Exercises

10:00 Coffee break

10:15 Type Circuit Setup
- Overview
- Project/Target structure
- Example of Usage

12:00 Lunch

13:00 Type Circuit cont
- Exercises

14:00 Coffee break

16:00 End of day 2

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Day 3

08:30 Setting up connections

- DriveBus
- ModuleBus (electrical/optical)
- Advant Fielbus 100 (AF100)
- CDP 80 panel
- FieldBus adapters
- Special I/O's

09:30 Exercises

10:00 Coffee break

10:15 Exercises continue

12:00 Lunch

13:00 Exercises

14:00 Coffee break

14:15 Exercises continue

16:00 End of the course

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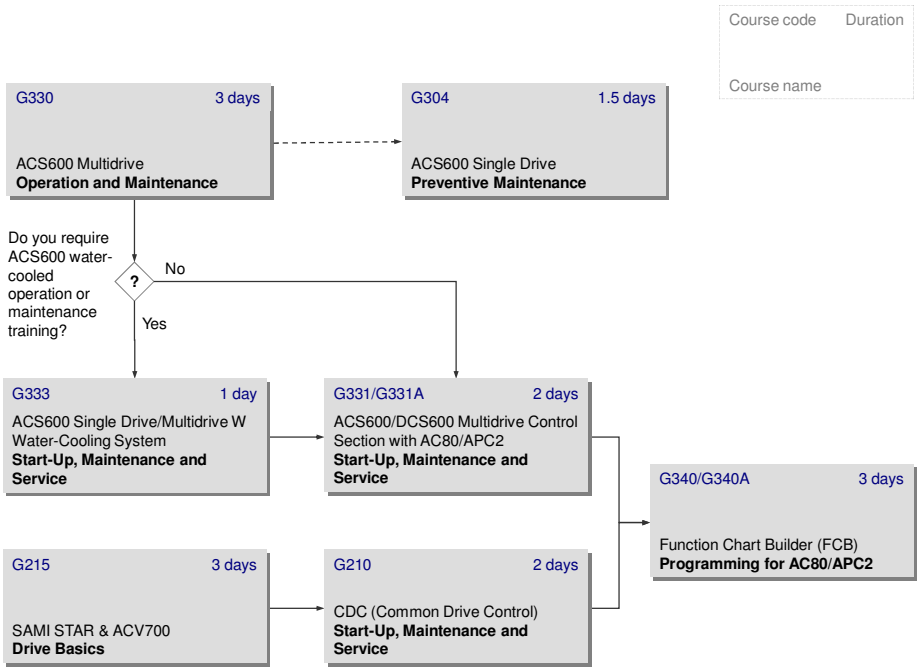
Learning Paths

ACS600 multidrives Learning paths



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