ABB
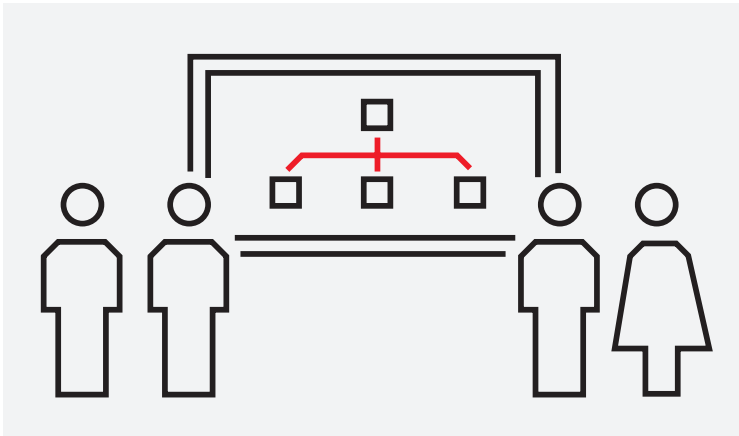
S312
S+ Engineering for Harmony

The goal of this course is to learn how to use the S+ Engineering tool to configure a control project with SD Series or Harmony Rack controllers.

Learning objectives
Upon completion of this course, students will be able to:
- Recognize the Symphony Plus system architecture and the function of the different components
- Install S+ Engineering software and load the license
- Navigate in the S+ Engineering application
- Manage users with S+ Engineering User Management tool
- Manage projects with S+ Engineering Project Admin tool
- Setup the Virtual PNI (VPNI)
- Create a Control Engineering project
- Learn main Function Code categories
- Create a Control Logic Document (CLD)
- Use Monitor, Tune, Trend and Verification functions in control logic
- Use S+ Engineering System Topology tool
- Create User folders, Shapes and Macros for use in control logic development
- Create a Control Logic Template (CLT)
- Navigate in Field Engineering for PROFIBUS and HART integration
- Use Bulk Engineering tool
- Configure and manage a console Tag list
- Edit Tags with Signal Manager tool

Participant profile
This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

Prerequisites
Students shall know the fundamentals of working with Control Systems and have basic knowledge of Windows Operating Systems and networking technologies.

Successful completion of the M101, M111, or S311 courses is required unless a prerequisite exemption is requested and granted by the instructor.

Topics
- Symphony Plus system architecture
- S+ Engineering installation and license
- S+ Engineering navigation
- User Management
- Project Admin
- Virtual PNI (VPNI)
- Control Engineering project
- Function Code categories
- Control Logic Document (CLD)
- Monitor, Tune, Trend and Verification
- System Topology
- User Folders, Shapes and Macros
- Control Logic Template (CLT)
- Field Engineering
- Bulk Engineering
- Console Tag list
- Signal Manager

Course type and methods
This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Duration
4 1/2 days

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Agenda

Day 1	Day 2	Day 3	Day 4	Day 5
Course overview	Control Engineering	Monitor, Tune, Trend and Verification	User Folders, Shapes and Macros	Tag list
Symphony Plus system architecture	Function Codes	System Topology	Control Logic Template (CLT)	Signal Manager
S+ Engineering installation and license	Control Logic Document (CLD)	Hands-on lab: Exercises	Field Engineering	Hands-on lab: Exercises
S+ Engineering navigation	Hands-on lab: Exercises		Bulk Engineering Tool	Questions & Answers
User Management			Hands-on lab: Exercises	
Project Admin				
Virtual PNI (VPNI)				
Hands-on lab: Exercises				