The goal of this course is to become familiar with MR Series control and I/O hardware components and architecture and develop troubleshooting abilities using the MR Series diagnostic and fault finding tools.

Learning objectives
Upon completion of this course, students will be able to:
- Explain the MR Series system architecture and component functionality
- Handle the hardware
- Navigate in S+ Engineering environment
- Perform the commissioning of stations and modules
- Execute diagnostics and fault finding
- Measure and force signals and carry out parameter settings
- Carry out diagnostics of communication network

Topics
- MR Series architecture
- Automation and communication networks
- System cubicles, earthing and shielding
- Controllers and I/O modules
- Assembly systems
- Front panel signaling
- Coupling Module CCC30/CCC30-2
- Cnet/Fnet Repeater CCR70
- Basics of S+ Engineering for Melody
- S+ Engineering for Melody workplace
- S+ Engineering for Melody Automation Functions
- Commissioning and loading of stations
- Simulation overview and history report
- Melody Analyzer
- Module fault analysis
- Hardware and software initialization
- Linking/unlinking and loading of modules
- Measuring, parametrization and forcing of signals

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

Prerequisites
Students shall have a basic knowledge of process control fundamentals. They should also have a basic understanding of Microsoft Windows operating systems.

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

Duration
4 1/2 days
## Agenda

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