

Network Design for Industrial Ethernet (CD)

To build a resilient network for industrial applications, incorporating fault tolerance and a redundant network architecture, the network designer must master more than just the current technology. The optimum network design must be future-proof - in respect of bandwidth requirements, additional applications, and new technologies.

Such forward looking design requires deep knowledge of future developments and their impact on the company.

Languages:

CDe	English
CDf	French
CDd	German
CDn	Dutch
CDp	Portuguese
CDs	Spanish

Duration:

1 Day
09:00 - 16:00

Price:

£395 ex. VAT

Schedule / Location:

<http://www.hirschmann.co.uk>



Recommended for
[certification](#) as
Hirschmann Industrial
Design Professional

Target Group

Network Designers and Developers

Prerequisites

Knowledge from "Industrial Ethernet I - the technical fundamentals" (CB1) or similar is required.

If available, the participant should bring a laptop with Ethernet connection and an operating system CD. Administrator rights are required.

Objective

The participants receive a detailed introduction to current Ethernet design techniques and network structures, as well as an overview of tomorrow's design tools. Recognition and resolution of design problems are taught using practical application examples in a workshop.

At the end of the course the participants will have all the knowledge required to design a future-proof Industrial Ethernet network.

Seminar Content

Advanced Network Design

Process

- Structured design
- Precise specifications and objectives
- Application requirements
- Traffic patterns

Design Calculations

- Collision domains
- Switch latency
- Network latency
- Buffering
- Determinism
- Network availability

Real-time Applications with Ethernet

- Current technological situation
- Future developments

Network Calculations

- Availability
- MTBFs
- Redundancy

Implementing Real-time

Protocols

- TCP/IP
- Soft/Hard real-time
- New protocols

Industrial Cabling

- Copper and fibre cable types
- Choosing connectors
- Structured cabling
- Documentation

IEEE Standards

Real Application Examples

