

SIMATIC S7 Ethernet/PROFINET Course (IK-ETHERPR)

Short Description

This course is directed at Programmers, Commissioning engineers, Configuring engineers, Service personnel, Maintenance personnel involved with the design, commissioning and sustaining of an S7 Industrial Ethernet and PROFINET networks. The course uses a 'hands-on' practical approach to reinforce the theoretical aspects of the training.

Content

Introduction to SIMATIC Net - Industrial Ethernet
Network Components and Installation Guidelines
Overview of Industrial Twisted Pair Networks
Industrial Twisted Pair Network Components
Communications Processors
Overview of supported protocols - TCP, ISO on TCP, ISO & UDP
Project Planning and Configuration of the Ethernet CP module
Data Communication with Industrial Ethernet using S7 Connections
NCM S7 Ethernet Diagnostics
Industrial Wireless LAN
OPC Basics
Overview and introduction to PROFINET technology
PROFINET IO device types: IO controller, IO device, IO supervisor
Connections, network components, transmission media
Planning and installation of switched Ethernet networks
Installation guidelines for PROFINET systems
Configuring of PROFINET IO networks
Description files of the devices
Structure, start-up and diagnostics of a PROFINET IO network
Function test of the PROFINET IO network
Diagnostics - Web Based Interface of PN CPU & FB126 for HMI display
MRP redundancy in PROFINET networks
Each of the above topic areas are backed up by practical exercises using a system model, consisting of the S7- 300 automation system, the ET200S distributed peripheral, the ET200M distributed peripheral and a conveyor model. Working examples are provided and tested out during the course.

Prerequisites

The ability to use a MS Windows PC (W7), keyboard and mouse to include opening and closing programs, locating files, copy and paste objects /data (text, etc). Drag and drop files, objects/data (text, etc). Use of menus and multi-menus, manipulation of windows within a multi-window environment. Use of MS Windows Help.
Must have attended either ST-PRO1 or ST-SERV1 and ST-SERV2.

Note

Course Duration - 5 Days
This training is not appropriate for trainees using S7-200/1200/1500 based systems. All configurations are demonstrated using Step7 V5.5 and not Step7 in the TIA Portal.

Type

Face-to-face training

Duration

5 days

Language

en

Fee

2,810 GBP