

SITRAIN Learning Event – TIA-PRO1

SIMATIC Programming 1 in the TIA Portal

Course description



In this first part of the SIMATIC TIA Portal programming training, the handling of the TIA portal, basic knowledge about the structure of the automation system SIMATIC S7, the configuration and parameterization of the hardware and the basics of classic PLC programming are taught.



Duration: 5 days



MYR 4600.00/pax

*Minimum 6 participants to start public class

Content & learning objectives



- Overview and significant performance characteristics of the SIMATIC S7 system family
- The components of the TIA Portal: STEP 7, WinCC, Startdrive
- Program execution in automation systems
- STEP 7 block types and program structuring
- Binary and digital operations in the function block and ladder diagram (FBD/LAD)
- Programming of parameterizable blocks
- Data management with data blocks
- Programming organization blocks
- Test tools for system information, troubleshooting, and diagnostics
- Hardware configuration and parameterization of the SIMATIC S7 modules, a PROFINET IO system (ET-200), a Touch Panel, and a drive
- Program Cycle, Process Image and Process Image Partition
- Explanation and using different organization blocks
- Startup of a drive (SINAMICS G120) and communication with standard telegram 1
- Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

Target group



- Programmers
- Commissioning engineers
- Engineering personnel

Requirements



- Basic knowledge of automation technology