

Siemens Certified Programmer in TIA Portal (CPT-FAP)

Short Description

You will deepen your theoretical knowledge with numerous practical exercises on a SIMATIC plant model on which you also take the examination. This consists of a SIMATIC S7-1500 automation system, ET200SP distributed I/O, WinCC Runtime, Motion Box and a belt model.

Objectives

This course consists of two days of theory as the ideal preparation for a 4½ hour examination on the third day! Your skills from SIMATIC programming training (courses TIA-PRO1 - TIA-PRO3) will be refreshed and consolidated. The practical assessment involves the creation and commissioning of a complex PLC program with components of Totally Integrated Automation from SIEMENS. After passing the examination successfully you will receive a recognised certificate that attests your specialist knowledge.

Content

Configuration of a SIMATIC controller
Applicative programming in a complex automation system
Programs for an automation system consisting of a standard PLC with distributed I/O, standard HMI device and bus system
Programming in compliance with IEC
Standardised user blocks
Creation and application of complex data structures
Variables of a composite and complex data type
System blocks
Indirect addressing of complex data structures and parameters
Industrial communication
Error diagnostics in a PROFINET IO system with an HMI device
Configuration of CPU-CPU communication via Industrial Ethernet
Human Machine Interface
Alternative message methods
Consistent transfer of entire data records (recipe management)
System error diagnostics with an HMI device
Motion control
Connection of drives
Functional safety technology
Significance of security technology in the prevention of accidents
Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

Prerequisites

PC literacy, keyboard/ mouse skills and a working knowledge of MS Windows enabling the participant to:-
Open and Close programs
Locate files
Copy and paste files, objects and data (text, etc.)
Drag and drop files, objects and data (text, etc.)
Use of menus and multi-menus
Manipulate windows within a multi-window environment
Use the Windows help
To enrol on this refresher course and examination module participants must have at least attended the Siemens TIA Portal Programming 3 course (TIA-PRO3).

Note

The examination is open book but documentation will not be issued in lieu of any TIA Portal Programming courses not undertaken.

Type

Face-to-face training

Duration

3 days

Language

en

Fee

1,505 GBP