

## TIA Safety Advanced on S71500F with STEP7 V17 (AS-TIAF)

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### Objectives

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Making participants' familiar/work with SIMATIC S7-1500F with STEP 7 V15.1, also configuring, programming, starting up, diagnosing and troubleshooting of the failsafe CPUs of the SIMATIC S7 Safety PLC, distributed ET200SP systems

### Content

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Standard Overview of Safety.  
Product Overview like SIMATIC Failsafe controller, Fail Safe system for factory automation  
Introduction of S7-1200F.  
Safety concept of Distributed Safety  
Sensor Actuator Interfacing like Sensor /encoder wiring to F-DI module, Actuator interfacing to F-DO  
Hardware Configuration like Configuration of S7-1500/ ET200SP & Simatic selection tool  
Training unit Configuration & addressing of S7-1500F & ET200SP  
Programming like Blocks of safety program, Structure & Execution of safety program  
Creating of F-FC/F-FB & PB Block, Programming guidelines, Passivation of F-module principle.  
Exercises & Hands on practice  
Fail safe communication between two failsafe controllers using PN/PN Coupler  
Response time of F-system, Plant Acceptance & Hardware maintenance  
Exercises & Hands on practice

### Prerequisites

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Basic Knowledge of Automation technology/relay logic and S71500F

### Note

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Hardware and Software to be used:  
1. S71500F kit with HMI panel and S71500F CPU's  
2. Laptops/ PC systems installed with TIA Portal V15.1 software with Safety advanced

### Type

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Face-to-face training

### Duration

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3 days

### Language

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