

Siemens Certified Service Technician Level 2 in TIA Portal (CP-FAST2)

OEM: Siemens • Duration: 3 Days (24 hrs) • Code: CST

COURSE MODULES & TOPICS**Module 1: SIMATIC S7 Controller Service and Diagnostics**

- Systematic troubleshooting and fault rectification in a complex automation system
- Hardware and software diagnostic functions of the TIA Portal
- Error analysis and handling via SIMATIC STEP 7 program organization blocks (OBs)
- Reading out and evaluation of SIMATIC S7 system diagnostics
- Block types (FC, FB, OB, DB) — practical applications and differences
- Programming in LAD, FBD, SCL, and STL

Module 2: Industrial Communication

- PROFINET IO system diagnosis using HMI devices
- CPU-to-CPU communication via Industrial Ethernet
- Sending process data and status information between CPUs

Module 3: Human Machine Interface (HMI)

- Displaying diagnostics and system error messages on HMI
- HMI alarm configuration and management in WinCC
- Recipe management and data transmission on HMI
- Alternative signaling methods

Module 4: Drive Technology

- Practical introduction to drive parameterisation within the TIA Portal
- Drive connections and commissioning (SINAMICS / Micromaster)

Module 5: Distributed I/O and PROFINET

- Commissioning distributed I/O modules on PROFINET IO network
- Analogue value processing — principles and implementation

Module 6: Certified Service Technician Level 2 Examination (CP-FAST2)

- Hands-on troubleshooting on TIA system model: SIMATIC S7, ET200 distributed I/O, Touchpanel, drive, and conveyor
- Written and practical examination (~70% SIMATIC S7, ~30% SIMATIC HMI and drives)
- Certification: Siemens Certified Service Technician Level 2 in TIA Portal