

Objectives:

- Create and manage projects in STEP7 using TIA Portal.
- Configure the connection with the controller and set up the necessary hardware.
- Understand the rules in writing programs in LAD/FBD language using logic arithmetic operations, timers and counters.
- Understand how to use basic testing and monitoring tools for programs written in LAD/FBD.
- Consolidate the acquired knowledge, with the numerous practical hands-on exercises.

Overview:

In this part of the training, participants shall learn to familiarize with TIA Portal, basic knowledge about the structure of the controller hardware and the basics of programming. They will learn to clear simple hardware faults and software errors and to create, modify and expand small PLC programs. They will also get an overview on operator control and monitoring.

Modules:

Module 1: Simatic S7 System Family Overview

Module 2: Installation/Maintenance of PLC

Module 3: Hardware Configuration

Module 4: Hardware Commissioning

Module 5: Block Architecture and Block Editor

Module 6: Binary Operation

Module 7: Digital Operation

Module 8: Introduction to HMI

Module 9: Exercises