Expert Automation Course DCS: SIMATIC PCS 7

(5 Days, 20 Hours)

Day	Content	Faculty

01	1. Hardware topics
	  a. Introduction to standard architecture of PCS 7 like ES, AS, OS-Server & OS-Clients
	  b. Introduction to AS Hardware like PS, CPU & CPs
	2. Commissioning Project from Scratch : Part 1
	  a. Working with SIMATIC Manager in PCS7 fashioned way.
	  b. Creating the Multi project and Configuring Hardware (AS & OS)
	  c. Working with different views like Component View & Plant View
	  d. Working with CFC Charts and develop logic using CFC charts
	  e. Optimization of the charts
		**Dr Salman Baig,
		Mr. Fahad Bilal,
		Mr Faheem Ansari**

02	3. Commissioning Project from Scratch : Part 2
	  a. Working with SFC Charts and develop sequences using SFC charts
	  b. Various control modes available with SFC charts
	  c. Configuration of sequential controls with SFC
	  d. Compiling, downloading & testing CFC & SFC charts
	  e. Implementation of Automatic and Manual Mode Control
	  f.
		**Mr Fahad Bilal,
		Mr Faheem Ansari**

03	4. Working with OS :*
	  a. Compiling Operator Station.
	  b. Creating process pictures in Graphics editor.
	  c. User interface in Process Control mode.
	  d. Working with standard faceplates, Messages and Trends.
	  e. Basics Operating and Monitoring.
	  f. Implementation of Automatic and Manual Mode Control
	  g. Customizing the OS
	  h. Archiving System
		Mr Fahad Bilal

	i. Introduction to OS Project Editor & Licensing Concept in PCS 7 j. Picture tree manager & user administration	

04	5. Bulk Engineering :
	    a. Mass Data engineering tools like Process Object View, Process Tag Type & Models using Import Export assistant
	
	6. Communication :
	    a. Station and network configuration.
	    b. Communication of remote stations with AS
	    c. AS-OS Communication
	    d. AS-AS communication
	    e. Introduction to server client architecture
		Mr Fahad Bilal

05	7. Diagnostics :
	    a. Fault Diagnostics in software / hardware options
	    b. Forcing, Simulation, Readback, Book back
	    c. Project Backup
	    d. Locking functions and operating modes
	    e. Hardware Replacement
	    f. Life beat monitoring
	8. Settings for AS & OS :
	    a. Introduction to Time synchronization, Life beat monitoring
	    b. Final steps of configuration
	    c. User block – attributes and visualization
	    d. Syntax Rules
	    e. SIMATIC PCS 7 Documentation and Support
	9. Hands on :
	    a. Engineers working in DCS controlled plant having knowledge in process automation.
	    b. Basic Know how about STEP 7 & WinCC Explorer software
		Mr Fahad Bilal