

Christiani Sharpline Technical Training
Indo German Joint Venture
Excellence in Technical & Vocational Training

FEBRUARY 2012 TO MAY 2012 TRAINING CALENDER

	Product	Topic	Days	Feb-12	Mar-12	Apr-12	May-12	Course Fee/ Per Person INR
1	CNC Basics	Introduction to CNC	5	20-24	26-30	23-27	21-25	8,000/-
2	CNC Programming and Operations	SINUMERIK 802D/840D	5	06-10	05-10	02-10	07-11	10,000/-
3	CNC Maintenance and Commissioning	SINUMERIK 802D/840D	5	13-17	12-16	09-13	14-18	15,000/-
4	PLC- Basics to Advanced	SIMATIC S7- 300	5	13-17	19-23	16-20	14-18	10,000/-
5	Mechatronics	Concept to Commissioning	8	20-28	12-20	09-13	21-29	20,000/-

NOTE: Fees exclusive of service tax currently @ 10.3%



TRAINING CENTRE



PLC & MECHATRONICS CLASSROOM



CNC CLASSROOM

Siemens Authorized CNC Training Centre
Siemens Automation Training Service Provider

COURSE CONTENTS

SIEMENS 802D SL / 810D / 840D CNC - PROGRAMMING & OPERATIONS

- ▶ Introduction to machine in general, Advantages & Benefits of CNC.
- ▶ Introduction to Turning & Milling Technology.
- ▶ Introduction to Sinumerik Systems - A brief history of controls.
- ▶ Tools and offsets.
- ▶ Zero offsets - Concepts, G5 - G59, Frames.
- ▶ Introduction to cutting technology.
- ▶ Introduction to part program structure & programming.
- ▶ Basic G - Codes, M - Codes & concepts of CCS & CSS.
- ▶ Tool movement and compensation - G41, G42, G40, G451, G452.
- ▶ Introduction to Direct Dimensions Drawing.
- ▶ Introduction to Siemens standard cycles.
- ▶ Practicals on : Use of milling, turning, Drilling and Thread cutting cycles, Grooving Circle to be loaded.

PLC - S7 300 - BASIC TO ADVANCED

- ▶ Brief history, need for PLC, Its advantages & working of PLC.
- ▶ Structure of S7 & presentation of various Simatic systems.
- ▶ Number systems, Logic operations & Data type.
- ▶ Programming languages and Step7 software installation & usage.
- ▶ Types of hardware & configuring Simatic station.
- ▶ Addressing of hardware (Absolute & Symbolic).
- ▶ Memory concept of CPU 31XC.
- ▶ Program execution structure of Simatic S7 300 & program modules (OB, FC, FB & DB).
- ▶ Creating a user program.
- ▶ Online testing, Diagnostic functions, Error Diagnostics & Error Handling.

SIEMENS 802D SL / 810D / 840D CNC - MAINTENANCE & COMMISSIONING

- ▶ Over view of SINUMERIK controls.
- ▶ Overview of components of SINUMERIK 802D.
- ▶ Overview of SINUMERIK 802D functionality.
- ▶ Machine Data for configuring control and drives.
- ▶ SINUMERIK 802 PLC Programming tool.
- ▶ NC/PLC interface structure and interface signals.
- ▶ Data backup on PCMCIA cards.
- ▶ Overall data backup and reloading of data.
- ▶ Practical training for commissioning & fault detection.
- ▶ Mechanical & Electrical Drive concept
- ▶ Modules of SIMODRIVE 611UE.
- ▶ Optimization of drives.
- ▶ Motor Family 1FT6, 1FK6 and 1PH.
- ▶ Connection as slave PROFIBUS.
- ▶ Handling & parameterizing by using commissioning tool SIMOCOM U.
- ▶ Fault detection, practical training for commissioning on training racks.

MECHATRONICS - CONCEPT TO COMMISSIONING

- ▶ Introduction to Mechatronics.
- ▶ Didactic concept of learning Mechatronics.
- ▶ Introduction to basic Mechanical Engineering Skills.
- ▶ Basic skills of Mechanical Assembly (types of Joints, types of fasteners, thread types, fit types etc. with interactive CD's) & related international standards.
- ▶ Hands on Mechanical assembly of the Mechatronics Model (Pneumatic Press) followed by inspection & evaluation.
- ▶ E-Pneumatic theory & applications.
- ▶ Basics in Electrical control circuits.
- ▶ Sensor technology.
- ▶ Electrical wiring of the Pneumatic Press.
- ▶ Control Engineering & computing on Siemens S7 300 PLC.
- ▶ Automation of the work sequence.
- ▶ Testing & commissioning with trouble shooting.
- ▶ Evaluation.

We also specialize in conducting on-site customized training programs



**Christiani
Sharpline**

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