### **About CRISP**

CRISP is established under Indo-German Cooperation agreement as an autonomous organisation of the Dept. of Technical Education and Skill Development, Govt. of M.P.

CRISP provides technical training and consultancy services for Industry Personnel, Government Officers, Faculties of academic and teaching institutions, Students and Jobseekers. CRISP is equipped with the state-of-the-art equipment and technology, latest software, qualified, trained and experienced trainers in the relevant fields.

CRISP has its head office in Bhopal and training centres at several national and international locations.

#### Other training programmes in Electrical and Electronics offered at CRISP are:

- **Embedded System Design**
- **Electronics Maintenance**
- WinCC SCADA
- RS View32 SCADA
- **Industrial Automation**
- Field Instrumentation & Control
- VLSI Design
- **PLC Programming and Application**
- Advance Training in PLC
- Electrical Control and Relay Logic Application
- Power Electronics and Industrial Drives
- MATLAB
- Fiber Optic Networking



# Patron Clients of CRISP























































#### Contact:

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# Centre for Research and **Industrial Staff Performance**

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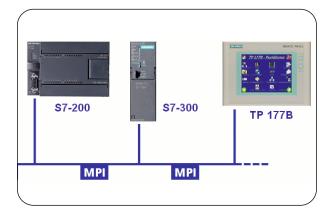


# **PLC NETWORKING**

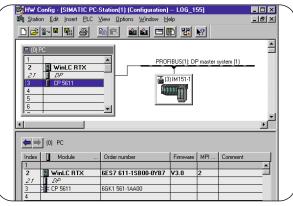


...unleashing the full potential of men & machines

#### **PLC NETWORKING**







# **Introduction of Course**

In Industrial applications, automation helps to achieve higher productivity and improves safety in working conditions, using intelligent Electronic Controllers called PLC i.e. Programmable Logic Controllers.

In this process the data is required to be transferred from one PLC to another to carryout various operations. With the improving in communication technology, industrial operations and control mechanism are also advancing. The setting up of communication links, has therefore, become an important parameter in which networking of PLCs is carried out using wired and wireless protocols.

A wired communication link offers a dedicated path of communication between the nodes ensuring high speed and error free communication. With a view to provide practical hands-on training for setting up communication links between various PLCs, CRISP has developed a well equipped PLC networking Lab with following hardware and software:

- Siemens S7 300 System
- Siemens S7 400 System
- PROFIBUS Cable
- Communication Processor Card
- Remote I/O's
- Simatic Manager Software
- PC Adaptor

#### **Course Contents**

- Introduction to PLC
- PLC hardware structure
- Parameter of PLC selection
- MPI communication
- Linear and Structural programming

- Shift, Rotate and Other Accumulator Operations
- Conditional and unconditional Jump Instructions
- Monitoring and Forcing functions
- · Addressing of analog programming
- PROFIBUS communication
- Ethernet communication
- Configure and establish communication through HMI panel

# Methodology

The programme consists of a mix of:

- · Lectures and presentations
- Demonstrations
- · Interactive discussions
- Hands-on practice

#### Pre-requisite

- Industry personnel with relevant experience.
- Passouts or students pursuing Degree/ Diploma in Electronics/ Electrical/ Instrumentation Engineering or equivalent.

### **Duration**

Full time: 3 working days (7 hours/day)

Part time: 4 weeks (20 working days, 2 hours/day)

#### **Course Fee**

Kindly refer to our training calendar at www.crispindia.com or can be obtaind from CRISP counselling desk

## **Mode of Payment**

Cash / Online / Debit / Credit Card