## SMT. S.R. PATEL ENGINEERING COLLEGE

Smt. Sushilaben Rameshbhai Patel Charitable Trust (SRPCT) was established in the year 2008 for the purpose of carrying out various social services and establishing educational institutes to uplift the knowledge and skills of students to build their career. The trust started an engineering college **Smt. S. R. Patel Engineering College** in the year 2009 at Dabhi, about 4 km away from Unjha and about 28 km away from Mehsana.

The lush green campus is spread over in a 12 acre area. It blends beautifully with the green landscaping, varieties of flowers and trees and a vibrant pursuit of knowledge.

The spacious buildings, well equipped laboratories and a pool of qualified and experienced staff members show the dedication of the trust towards society.

The trust is involved in large numbers of social activities in North Gujarat region.

## OBJECTIVES OF THE PROGRAM

The main objective of this WORKSHOP is to make the aspiring engineers acquainted with the conceptual as well as practical knowledge of the Industrial Automation & latest technologies being used to achieve industrial automation. The idea of organizing this workshop is to inculcate the basic fundamentals of automation in the students and provide them with a platform to work on, In The Near Future.

The Most Used Guiding Force Behind An Automated Industrial Plant Is A "Programmable Logic Controller" Generally Known As A PLC. PLCs Along With Certain Other Necessary Ingredients Like Sensors, Motors, Actuators, Valves, Conveyors, Boilers, SCADA Systems, Computers & Many More, Makes A Real Automated Manufacturing Plant.

#### HOW TO APPLY

The applicants are required to online registration along with the registration fees so as to reach the coordinator on or before 23<sup>th</sup> August, 2017.

For Online Registration:-

https://goo.gl/forms/mOMBIZdTFm4JL7sF3

Address for Correspondence:
Smt S. R. Patel Engineering College
At. Dabhi, Ta. Unjha
Dist. Mehsana North Gujarat, INDIA
Phone No. (02767)272009/11/12, 9824962824
Email Id: -info.srpec@gmail.com, info@srpec.org

### COURSE REGISTRATION FEES

Rs. 200/- for Other Colleges student SRPEC Student Free of Cost Fees can be paid by Cash/Demand Draft/Local Cheque.

#### COURSE EXPERT

Person from Industries, Embed Tech, Mehsana

## COORDINATORS

## ASSOCISION WITH



Mehsana,

Email- embedtech1@gmail.com



# Three Days Workshop On "Industrial Automation"



25-27 August, 2017

# Organized by

Smt. S. R. Patel Engineering College, Unjha

Website: www.srpec.org.in Tel: 02767-272009/11/12 Fax: 02767-272617

#### **About EMBED TECH**

## This company work in below area

- Elevator Operating Panel
- Embedded Solution
- Automation Solution
- Customize Electronics System

#### What is Industrial Automation?

Automation is basically the delegation of human control function to technical equipment. It is the use of control systems such as computers, PLCs, Microcontrollers to control machinery and processes to reduce the need for human sensory and mental requirements as well.

Industrial Automation i.e. to "Automate Industry" is the basic need of almost every type of manufacturing and production unit today. Food/ Beverage, Metal, Mining, Power, Textile, Petrochemical, Machine Manufacturing, Automobile etc are the few examples where we see the automation today.

# **Topics to be covered in this Workshop:**

# DAY 1

PLC- ALLEN BRADLEY
SOFTWARE- RS LOGIX500

| NO. | THEORY & PRACTICAL        |
|-----|---------------------------|
| 1   | INTRODUCTION & HISTORY    |
| 2   | OVERVIEW OF PLC           |
| 3   | PLC PROGRAMMING LANGUAGES |
|     | ELECTRIC BASIC WIRING AND |
| 4   | CONTACT                   |

| 5  | INPUT/OTPUT UNDURSTAND       |
|----|------------------------------|
| 6  | DIGITAL GATES AND LADDER     |
| 7  | BASIC FANDAMENTALS IN LADDER |
| 8  | SENSOR BASED PROGRAM         |
| 9  | TIMER DEFINE                 |
| 10 | COUNTER TO COUNT             |
| 11 | COUNTER TO TIMER             |
| 12 | ANALOG FOR SENSOR            |

# DAY 2

PLC- ALLEN BRADLEY
SOFTWARE-VIJEO CITECT

| NO. | SCADA DESIGNING           |
|-----|---------------------------|
| 1   | OVERVIEW OF SCADA         |
| 2   | SCADA DESIGNING           |
| 3   | LOCAL TAG DEFINE IN SCADA |
| 4   | DEFINE SWITCH AND OUTPUT  |
| 5   | TANK FILLING SETTING      |
| 6   | OBJECT MOVEMENT           |

|     | DAY 3 MORNING             |
|-----|---------------------------|
| NO. | PLC SCADA COMMUNICATION   |
|     | METHOD OF PLC SCADA       |
| 1   | COMMUNICATION             |
|     | PLC PROGRAM TAG DEFINE IN |
| 2   | SCADA                     |

| 3 | DEFINE SWITCH AND OUTPUT |
|---|--------------------------|
| 4 | TIMER SETTING IN SCADA   |
| 5 | COUNTER SET IN SCADA     |
| 6 | PROCESS PLANT DESIGNING  |

# **DAY 3 EVENING**

PLC - DELTA
SOFTWARE-WPLSOFT

| NO. | THEORY & PRACTICAL       |
|-----|--------------------------|
| 1   | INPUT/OTPUT UNDURSTAND   |
| 2   | SENSOR BASED PROGRAM     |
| 3   | TIMER DEFINE             |
| 4   | PRACTICAL SESSION ON PLC |
| 5   | PRACTICAL SESSION ON HMI |
| 6   | COUNTER TO COUNT         |
| 7   | COUNTER TO TIMER         |