

# Mechatronics with Industry 4.0

## Overview:

Planning, programming, commissioning, operation and troubleshooting of production systems, are taught at various levels of complexity:

- with Industry 4.0 technology
- with systematic use of industrial components like IoT, RFID
- in close cooperation with market leaders in automation

## Participant Profile:

- Operation, Maintenance, Assembly & Planning personnel designers.
- Engineering Students.

## Contents:

- Introduction to system design using Industry 4.0
- Programming with 2<sup>nd</sup> generation PLC
- Programming of IoT based mechatronics systems.
- Creating OPC server
- CNC Programming
- Configuration of RFID
- Design of SCADA view of a plant in Active Cockpit

## Learning Target:

The Participants will be able to

- Understand the physical components, working, construction and functions of various Mechatronics 4.0 components.
- Program the Industry 4.0 based system on various aspects

## Prerequisites:

- Basic knowledge on PLC programming.
- Basic knowledge on Pneumatic & Hydraulics
- Communication Skills in English.

## Teaching & Learning Media:

- Multimedia Presentation.
- Cut-section & Transparent models.
- Sample units & Power units.

## Evaluation:

- Theory & Practical Exam
- Project work based on Industrial Application.

## Time Durations:

- 36 Hours
- 6 Hours/ Day

## Fee:

- ₹ 5500/- + GST

