One-day workshop

Objective of this Workshop:

For Teachers to Stay ahead in educational trends, and better prepare students. For Parents to Understand future job markets, and guide children to success. For Students to Explore career opportunities, and gain essential skills. For Industry Pros to Stay competitive, and learn cutting-edge tech.

In this one-day workshop, participants will:

• Learn about managing a product from start to finish (PLM)

• Learn about automatic machine operations.

• Understand how to program PLCs: Learn to give machines instructions with codes.

• Discover how robots work in industries.

• Explore Industry 4.0: Understand how technology changes industries.

• Discover smart manufacturing systems

• Learn about upcoming manufacturing trends.

What Includes?

Unit 1: Introduction to PLM and Basics of Automation

• Learn about managing products from start to finish (PLM)

• Get introduced to the Magic of CAD, CAM, CNC, and 3D Printing
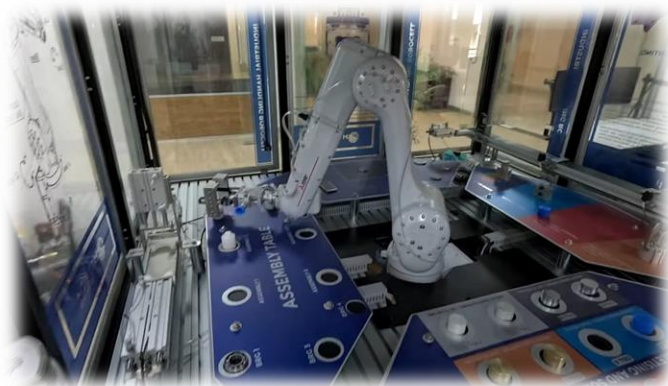
Unit 2: Fundamentals of Automation

• Understand how machines work with fluids and electricity

• Learn basic circuit building with simulation software

Unit 3: PLC Basics and Automation

• Learn about PLCs, and HMIs (machine controllers with buttons and screens.)

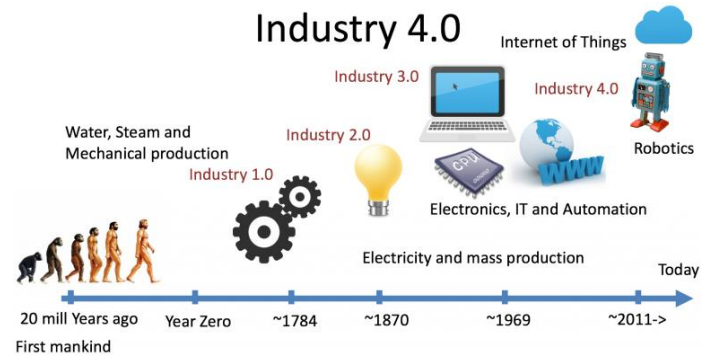• Get introduced a smart system that helps manage and keep an eye on things in factories and plants (SCADA)

Unit 4: Overview of Industrial Robotics

• Learn about industrial robots and how they're used

• Get a basic understanding of robot programming with simulation software

Unit 5: Introduction to Industry 4.0

- Discover the core ideas and technologies of Industry 4.0

- Learn about digital twins and simulation tools

- Get an overview of sensors, cloud, and communication platforms

Unit 6: Smart Factory and Future Manufacturing

- Learn about intelligent manufacturing systems

- Understand how cyber-physical systems work in Industry 4.0

- Get introduced to smart factory components and applications