

### Objective of the STC':

- Short Term Course (STC) is devoted to the essentials of the IoT in Industrial sensing applications.
- To enhance the knowledge and usage of tools and techniques for the implementation with IoT.
- STC' provides an exposure to new areas of research and development.
- To create an opportunity for exchange of knowledge through a common platform.

### Program Outcome:

- Participants will understand the IoT concepts with implementation using raspberry pi and Node-Red.
- After successful completion of this course, participants will be able to create a application with IoT successfully.

### Target Participants :

Faculty members of all Engineering Colleges and Polytechnic, Industry Professionals, Govt. officers, Scientists, Research Scholars. Any Students from UG, PG and Diploma.

### Registration fee detail

(including GST)

On or Before February 21th, 2022

Course Fee : Rs. 500/-

For registration use below mention link or scan QR Code

<https://forms.gle/o4JwpAqigY3MMr8t8>



For any query contact  
9417689170 / 9417535469

**The e-certificate will be given and will be sent to the registered email id of the participants who attains course**



## One Week (online) Short Term Course on Industrial IoT: Industrial sensing with Raspberry Pi-4

24<sup>th</sup> February 2022 to 28<sup>th</sup> February 2022

Organized by  
**Centre of Excellence- Siemens**  
**Workshop and Skill Development Centre**  
**Punjab Engineering College**  
**(Deemed to be University)**  
**Chandigarh-160 012**

### Chief Patron

Prof. Baldev Setia,  
Director, Punjab Engineering College

### Patron

Prof. Rajendra M. Belokar  
Program Director CoE-Siemens  
Head Workshop & Skill Development Centre

### Course Coordinators

Dr. Padmavati  
Dr. Poonam Saini

### Digital Session Host

Er. Nitika Khurana  
Er. Amninder Singh  
Email:[coe.siemens.pec@pec.edu.in](mailto:coe.siemens.pec@pec.edu.in)

## About the CoE Siemens PEC

Established in 2019, this world-class skill development centre is dedicated to the areas of engineering, product development and advanced manufacturing technologies in the following domains

- **Automotive**
- **Aerospace**
- **Industrial Machinery**
- **Renewable Energy**
- **Internet of Things**

The Siemens Centre of Excellence (CoE) aims to train Engineering, Diploma students and faculty on world-class Siemens Equipment and Software. The CoE provides training by Siemens-certified training partners.

## Objectives of CoE

- Establish industry partnerships to guide, support, and validate industry relevant learning activities
- Assist exploratory research projects to foster relevant industry innovate
- Assist integration of technology into college curricula
- Facilitate the pursuit of career opportunities to interact with research expert to learn from their experience the possible are of research.
- Enable technology adoption by industry

## List of Labs at CoE

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| •Automation Lab                    | •Process Instrumentation Lab      |
| •Product Design and Validation Lab | •CNC & NC Programing Lab          |
| •Advance Manufacturing Lab         | •Metrology Lab                    |
| •Test and Optimization Lab         | •Renewable Energy Lab             |
| •Robotics Lab                      | •Electrical and Energy Saving Lab |
| •CNC Machine Lab                   | • Mechatronics Lab                |
| • Rapid Prototyping Lab            | •Internet of Things (IOT) Lab     |

STC Session will contain the expert lecture followed by the Siemens Lab session

The Expert form the industry as well as from the leading academic institution will deliver their talk on Industrial Internet of Things.

## Major course content

- IoT Devices and Networking
- IoT Cloud Processing and Analytics
- Intelligent Industries
- Sensors and Actuators
- Microcontroller and Programing
- Communication Networks
- Data Handling and Analytics
- Embedded Programing
- Machine Learning for IoT

## ADVISORY COMMITTEE

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