

## RESOURCE PERSONS

The resource persons consist of faculty members from College of Engineering Trivandrum and other reputed academic institutes/Industries.

## TA/Accommodation

Participants have to make their own arrangements for travel, boarding, and lodging. No TA/ DA will be given to the participants.

## IMPORTANT DATES

Last Date for Registration: 23/12/2019  
Date of Selection Intimation: 24/12/2019  
Confirmation of Participation: 26/12/2019

## ELIGIBILITY

The FDP is open for faculty members of Engineering colleges affiliated to APJ Abdul Kalam Technological University (KTU). Participation certificates will be issued to all the participants who have attended the FDP on all days.

## HOW TO APPLY

No. of seats is limited to 30. The application included herewith or in a similar format, duly recommended by the Head of the institution should reach the coordinator on or before 23rd December 2019. Advance copy of the application may be sent through e-mail. The selected candidates will be intimated through e-mail.

## ADDRESS FOR CORRESPONDENCE

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Faculty Development Programme  
Sponsored by



On

**Industrial Automation**

**30th December 2019 - 04th January 2020**



*Chief Patron*  
Dr. Jiji C.V.  
Principal, CET

*Patron*  
Dr. A. Samson  
HoD, ME

Dr. Vinod B.R.  
Coordinator, Bosch Rexroth CET Centre of  
Excellence in Automation Technologies

*Organized by*  
**Department of Mechanical Engineering  
& Bosch Rexroth CET Centre of Excellence in Automation Technologies**  
College of Engineering Trivandrum  
Thiruvananthapuram

*Coordinators*  
**Prof. Ajith R.R  
Prof. Shafeek M**

## ABOUT THE COLLEGE

College of Engineering Trivandrum (CET), is one of the most sought after Engineering Colleges for engineering courses. Commanding an expanse of lush greenery of 82 acres, the CET campus is at Kulathoor, within the city limits of Thiruvananthapuram. CET is affiliated to APJ Abdul Kalam Technological University and the courses are approved by AICTE and most of the Departments are approved research centres. More than 4000 students are enrolled for various undergraduate, post graduate and part time courses in CET. Innovations are encouraged by providing facilities to set up incubation units. The research park within the CET campus, is another breakthrough in opening up avenues for inventions in engineering science.

## ABOUT THE DEPARTMENT

The department of Mechanical Engineering College of Engineering Trivandrum (CET) established at the inception of the college (1939) is one of the major departments offering a variety of PG courses and research programmes in the areas of Propulsion Engineering, Thermal Sciences, Machine Design, Industrial Engineering, Automation and Financial Engineering. The Department offers exceptional opportunities for undergraduate and graduate study and research.

## ABOUT THE CENTRE

The Bosch Rexroth-CET Centre of Excellence in Automation Technologies is a joint initiative of Bosch Rexroth, Germany and Government of Kerala for imparting hands on training with latest components used in the area of industrial automation such as hydraulic drives, pneumatic drives, proportional hydraulics, sensors, PLCs, mechatronics, robotics, motion logic controllers etc.

The primary objective of the centre is to bridge the gap between the Industries and the Academics. Centre caters to the needs of Polytechnics, Vocational Institutes, Engineering Institutes and Industries in the field of automation technology. The centre has dedicated faculty trained by Bosch Rexroth from College of Engineering, Trivandrum. The centre aims at training industries personnel and students of various institutions from +2, ITI, Diploma, Engineering degree and PG level in Automation field to enable our industry personnel, faculty and students to have hands on experience and up gradation of technical skills which are essential for industrial progress.

## ABOUT THE COURSE

In the present era of automated manufacturing and Industry 4.0, the industrial hydraulics and pneumatics form an integral part of all manufacturing systems. Programmable and flexible automation systems form the heart of modern production industries. These technologies demand expertise in key areas like automation scheme design, cnc systems, robotics, logic controllers etc. The sessions are designed for effective training on these technologies with the help of experts from industries and academia.

### **Course Content**

- Introduction and overview of Industrial Automation
- Industrial Automation with electro hydraulics and electro pneumatics.
- Sensorics
- PLC: Basics, Hardware/ Software and Programming
- Industrial and field robotics
- Hands on Training sessions in Hydraulics, Pneumatics, PLC, Sensorics and robotics