

# ROBOTICS

14<sup>th</sup> - 16<sup>th</sup>  
January  
2020

## PROFORMA FOR APPLICATION

### A HANDS-ON TRAINING PROGRAMME ON ROBOTICS FOR POLYTECHNIC STAFF

14<sup>th</sup> - 16<sup>th</sup> January 2020

## Important Date

Last date for submitting the application 10<sup>th</sup> January  
2020, Friday.

## Address for Communication

Dr. Sudheesh R S.

Assistant Professor

Department of Mechanical Engineering

Mobile: 8086185303

[rssudheesh@gectcr.ac.in](mailto:rssudheesh@gectcr.ac.in)

Dr. Lalu P P.

Assistant Professor

Department of Mechanical Engineering

Mobile: 9447921327

[lalujesus@yahoo.co.in](mailto:lalujesus@yahoo.co.in)

Government Engineering College, Thrissur

- I. Name :
2. DOB & Age :
3. Sex : Male / Female
4. Designation :
5. Department :
6. Institution :
7. Type of Institution :
8. Address for communication :
9. Mobile No. :
10. E- mail :
11. Food Preference : Veg / Non Veg
13. Accommodation required : Yes /No

## Sponsorship

Mr./Mrs./.....  
is an employee of our institute/ organisation and is hereby  
sponsored for the above short term training programme.  
He / she will be permitted to attend the course, if selected.



GEC Thrissur Location

**SPONSORED BY**  
**DIRECTORATE OF TECHNICAL EDUCATION**  
**KERALA**

**CONDUCTED BY**  
**NODAL CENTRE FOR ROBOTICS AND AI**  
**GOVT ENGINEERING COLLEGE THRISSUR**

**COORDINATOR**                      **CO-COORDINATOR**  
**Dr. SUDHEESH R S**                      **Dr. LALU P P**  
**DEPT. OF MECHANICAL ENGINEERING**

Place:                                      Signature of Sanctioning  
Date:                                      authority with Seal



## About GEC THRISSUR

The Government Engineering College, Thrissur, one of the premier technical institutions in the country, had its modest beginning in the year 1957. At present, the college has strength of more than 3000 students and 500 staff including 225 faculty members. The institute is certified by ISO.

## About Nodal Centre for Robotics and AI

Nodal centre for Robotics and Artificial Intelligence (AI) is being established at Govt. Engineering College, Thrissur with two-fold objectives of 1) Providing facilities for frontline research in Robotics and AI 2) Organizing training and skill development programmes for technical institutes in the field of Robotics and AI. The facility is envisaged to be shared by various engineering colleges, polytechnics and technical high schools under Department of Technical Education, Kerala and function as a centre of excellence in ROBOTICS & AI. The centre which started functioning in June 2019 is funded by Higher education department, Government of Kerala.

## About the Course

Essentially, a robot is a mechanical device that can be programmed to follow a set of instructions. The robot has a processing unit, sensors to perceive its environment, and motors and actuators to move its limbs or wheels. There is considerable anecdotal evidence that students

respond well in subjects involving programming of robots. Teaching robotics in the school level can improve their creative thinking process. Hands-on learning activities enhance concentration and attention levels, because the more students learn physical skills, the more they want to continue being in the lesson. Further, with advanced technologies such as artificial intelligence, driverless cars, and spacecrafts taking shape every day, the present generation of students needs to be more prepared for technological changes than ever before. The proposed program envisages to train the teaching staff of technical schools thereby ensuring proper transfer of knowledge to students. The program is designed to train the participants in Robotic technologies with emphasis to hands on training in the related fields.

## Course Content

- Aurdino programming lab
- Introduction to Linux and Python programming for robotic application
- Programming of SBC s-Raspberry Pi – hands on
- PLC programming
- 6axis robot programming using Dual arm robot - hand on
- Programming of Robotic Kits

## Resource Persons

The resource persons are from leading engineering institutions in India.

## Participants

Staff members from Polytechnic colleges in Kerala.

## TA and Accomodation

Participants are eligible for TA as per Government norms. Accomodation will be provided for the participants on prior request.

