

## Application Form

### FSDTC Programme Hand-on Training on Robotics and Automation 7-10 January 2020

1. Name:
2. Designation:
3. Institution/Department:
4. Age:
5. Gender: Male/Female
6. Qualifications:
7. Address for communication:
8. Mobile No:
9. Email:
10. Accommodation Required: Yes/No
11. Food Preference : VEG/Non VEG

#### Declaration

The information provided above is true to the best of my knowledge and belief. I would abide by the rules and regulations of the course. I also undertake that I will attend the course for the entire duration if selected.

Place:

Date: Signature of the participant

#### Sponsorship

Certified that Dr/Mr/Mrs .....  
is a permanent employee of this institution. He /she  
Will be permitted to attend the course, if selected

Place: Signature of Head of the Institution

Date: (office seal)

#### Who should attend?

This programme is designed for the faculty members working in the AICTE approved government/ aided/self-financing engineering colleges and Polytechnic colleges in Kerala. Faculty members from all branches of engineering are eligible to apply as the programme is interdisciplinary in nature. The number of participants is limited to 30. Admission to the programme is on first come first serve basis.

#### How to Apply?

Application for admission to the course should be submitted online through the DTE website by creating an account in the Training Management System (TMS) portal of DTE:

<http://admissions.dte.kerala.gov.in/tpms/login>

#### Registration fee

No registration fee will be charged from the participants.

#### Travelling Allowance & Accommodation

Outstation candidates from government and government aided colleges are eligible for travelling allowances, and the TA will be provided as per the FSDTC norms, subject to the availability of fund

#### Important dates:

Last date of receipt of application: 6-1-2020

##### **Coordinator**

Dr Lalu P.P Asst. Professor (Mechanical Engg.)

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##### **Co-Coordinator**

Dr. Sudheesh R.S Asst. Professor (Mechanical Engg.)

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**Sponsored by**  
**Faculty and Staff Development Training**  
**Centre (FSDTC)**  
**Govt. Engineering College, Thrissur**

**Faculty Development Programme**

**Hands-on Training on Robotics**  
**and Automation**  
(7-10 January 2020)



##### **Coordinator**

Dr. Lalu P.P Asst. Professor (Mechanical Engg.)  
Govt. Engineering College Thrissur

##### **Co-Coordinator**

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Govt. Engineering College Thrissur



**Organized by**

**Department of Mechanical Engineering and**  
**Nodal Centre for Robotics and AI , GEC Thrissur**

## About the Course

Essentially, a robot is a mechanical device that can be programmed to follow a set of instructions. A typical robot has sensors to perceive its environment, motors and actuators to move its limbs or wheels and a processing unit.

There is considerable anecdotal evidence that students respond well in subjects involving programming of robots. Teaching robotics in the school/college 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 better prepared for technological changes than ever before. The program envisages to train the teaching staffs of engineering colleges thereby ensuring proper transfer of knowledge to students. The program is designed to train the participants in Robotics technologies with to use hands on experience

## Resource Persons

The resource persons are from leading engineering institutions in India

## Course Content

- Introduction to Robotics and Automation
- Robot Kinematics , Dynamics and Path planning
- ROS programming hands on sessions
- Sensors and Actuators in Robotics
- Computer /machine Vision techniques
- Control system theory
- Hands on session-Simulink
- Python programming in Mechatronic applications
- Introduction to machine learning

## About the College

The Government Engineering College Trichur is one of the leading technical institutions in the state of Kerala. The college celebrated its Golden Jubilee in the year 2008.

More than a half century long services of the institution has created a large number of alumni who occupy covetable managerial and key technical positions in industries and government organisations within the country and abroad. The college has a lush green campus which spreads over an area of 75 acres at Ramavarmapuram, and is located at a distance of 6 km from Trichur Railway Station and about 5 km from the heart of the city. The college, a QIP center, is affiliated to the University of Calicut, and runs eight undergraduate and ten post graduate programmes. In four departments, Ph. D programme is also offered.

The Department of Mechanical Engineering came into existence at the very inception of the college, and has been instrumental in moulding the students into

eminent engineers. The department is a research centre of the University of Calicut. The department offers B. Tech programme, M. Tech programmes in Production Engineering and Internal Combustion Engine & Gas Turbines, and Ph.D programme.

## About NCRAI

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

