

## ABOUT THE INSTITUTE

The Indian Institute of Information Technology Tiruchirappalli (IIIT) was established in the year 2013-14 as the Institute with National Importance under Public Private Partnership Mode by Ministry of Human Resource Development (MHRD), Govt. of India. The Stakeholders of IIIT are Central Govt. of India, State Govt. of Tamil Nadu, and Industry partners, viz., TCS, CTS, Infosys, Ramco Systems, ELCOT, and Navitas. The main objective of IIIT is to impart world class education in Engineering and Technology to conduct research in the relevant fields, and to further advance learning and dissemination of knowledge. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development.

A major objective in establishing IIIT is to set up a model of education which can produce best-in-class human resources in IT and can harness the multidimensional facets of IT in various domains. While the number of students produced would be small, the impact they create would be great. IIIT Trichy is operating in the temporary campus within the premises of National Institute of Technology (NIT) Campus, Tiruchirappalli – 620 015, Tamil Nadu, since March 2016. NIT Tiruchirappalli is the mentor institution that provides academic and administrative support to IIIT.



## ROBOTICS CLUB -IIIT

Robotics Club, IIIT- Tiruchirappalli started to build its own robot for intended tasks and field applications like service, assist humans, self-path identification, and driving in transports, etc.,. The club aims to regularly conduct workshop to train students and external people through hands-on/practical sessions from scratch. The club also conducts events throughout the year to encourage the students to learn the practical issues in building robots. The students of the robotics club are enthusiastic to build prototypes of machines for competent national and international events and provide practical solutions.

### IMPORTANT DATES

Last date for receiving applications

**12 March 2020**

Intimation of selection

**13 March 2020**

**Mode of Intimation**

**Through Email only**

### ELIGIBILITY

Faculty members from Technical Institutions, Research Scholars, PG/ UG Students, Professionals working in Industry and Government Organizations.

**Note:** The course is conducted as a hands-on training. The number of participants in the training program is limited to 40 on a 'first come first serve basis.'

### HOW TO REACH IIIT-TIRUCHIRAPPALLI

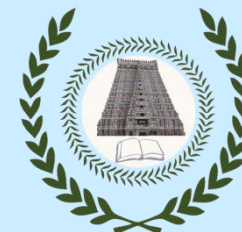
IIIT-Tiruchirappalli is located about 22 km from Tiruchirappalli Junction / Central Bus-stand on the Tiruchirappalli - Thanjavur Highway. The simplest and most economical way to reach NIT-Tiruchirappalli is by bus. Board Thanjavur bound mofussil or route bus and get down at IIIT, NIT campus, Tiruchirappalli. The journey time from Tiruchirappalli will be around 40 minutes.

## A two-day Hands-on Training

on

## **“Building a Robot from Scratch”**

**16-17, March 2020**



Co-ordinators

**Dr. M. Senthil Sivakumar**

**Department of Electronics and Communication Engineering, IIIT.**

**Dr. C. Velmurugan**

**Department of Mechanical Engineering, IIIT.**

**Organized by**

**Robotics Club**

Indian Institute of Information Technology Tiruchirappalli,  
Tiruchirappalli — 620 015, Tamil Nadu



## SCOPE AND OBJECTIVE

Primary objective of this training is to explore the fundamental and advances in robotics by providing a common platform to interact with the experts of the field. The contents include introduction to advanced techniques used in robotics, their end applications, and recent developments. This course will be a platform to gather, provide clear cut ideas regarding robots and its use in automation to researchers who are working and planning to work in this field. The program also motivates research ideas with practical applications by the experts in this field of research.

## COURSE CONTENT

The following topics will be covered in the course:

- ◆ Industrial Robots – An Introduction
- ◆ Introduction to sensors and actuators
- ◆ Applications of Robots

### Hands-on training on

- ◆ Formulations of drivers for Robots
- ◆ Controlling DC motor with motor Drivers
- ◆ Design of motor drivers based on the power
- ◆ Interfacing sensors with motors
- ◆ Interfacing sensors with LCD
- ◆ Design and Implementation of obstacle avoider robot
- ◆ Design and Implementation of Line follower Robot
- ◆ Node detection and node counting
- ◆ Design and Implementation of Remote-controlled Robot
- ◆ Programming for robots in different applications

## FACULTY

Training will be delivered by resource persons from Industries. Along with that a practical session will be conducted for individual topic in the schedule.

## REGISTRATON FEE

Students (UG/PG/Research Scholars) : **Rs 1000/-**  
Industry and Academia : **Rs 2000/-**

## REGISTRATION DETAILS

The participants are requested to fill in the registration form and send it to the Workshop Coordinator along with the Demand Draft for applicable amount drawn in favor of “**The Director, IIIT Tiruchirappalli**”, or remitted through **On-line/NEFT** to the bank account given below, so as to reach us on or before **12.03.2020**.

## BANK DETAILS

**A/C Name:** IIIT Srirangam.

**A/C Number:** 35786918437

**Bank:** SBI, NIT Campus, Tiruchirappalli

**IFSC code:** SBIN0001617

The participants are also requested to confirm their participation in the workshop by sending an e-mail to [roboticsclubiit@gmail.com](mailto:roboticsclubiit@gmail.com) on or before **13.03.2020**.

The participants will be provided with working lunch. Accommodation will be arranged in the NITT Hostels and guest house based on the availability (on payment basis).

No TA/DA will be paid to the participants.

## ADDRESS FOR CORRESPONDANCE

**The Coordinator,**  
**Robotics Club,**  
Indian Institute of Information Technology  
Tiruchirappalli,  
NIT campus, Tiruchirappalli, Tamil Nadu,  
620015  
[roboticsclubiit@gmail.com](mailto:roboticsclubiit@gmail.com)  
9380984544, 9943022961

## REGISTRATION FORM

**A two-day Hands-on Training on**

## Building a Robot from Scratch

**16.03.2020 – 17.03.2020**

Name :  
Qualification :  
Designation :  
Gender (M / F) :  
Department :  
Organization :  
Mailing Address :

Phone :

Email :

### Details of Registration Fee

Amount:

DD/ Reference No. :

Date :

Bank Name & Place:

Signature of Applicant:

## SPONSORSHIP CERTIFICATE

Mr/Mrs/Ms/Dr. \_\_\_\_\_  
is an employee of our Institute / Organization is hereby sponsored and he / she will be permitted to attend the course in full, if selected.

**Signature of the Sponsoring Authority with Seal  
and Date**