

Kannan M. Moudgalya, Ph.D.

Erach and Meheroo Mehta Advanced Education Technology Chair Professor

Department of Chemical Engineering Indian Institute of Technology Bombay

Powai, Mumbai-400 076, India.

Phone: (+91-22) 2576 7213

Fax: (+91-22) 2572 3480

डरेच तथा मेजरू मेजता पीठासीन प्राध्यापक रासायनिक अभियांत्रिकी विभाग भारतीय प्रौद्योगिकी संस्थान मुंबई

पवई, मुंबई 400 076, भारत.

Email: kannan@litb.ac.in Website: www.iitb.ac

04 December 2019

Dear Sir/Madam,

Greetings from IIT Bombay!

We are glad to announce a one day workshop on Arduino, a free/libre and open source hardware. Arduino consists of both a physical programmable circuit board and a software **IDE** (Integrated Development Environment) that runs on the computer.

This workshop will be conducted for Teachers under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), funded by the Ministry of Human Resource Development, Government of India.

Details of this programme are given below:

Workshop Name: One Day workshop on Arduino for Teachers

Who should attend? The participant should be a teacher or a research scholar from Electronics or allied engineering fields and should have basic electronics knowledge, required to work with Arduino, breadboard and electronic components.

Date: Saturday, 08 February 2020

Venue: 142 participating remote centres. A list of which will be available through this link:

http://www.it.iitb.ac.in/nmeict/coordinatorList.html?workshopid=wAF5jyxA48ecERjoWkMBG A&callFrom=1

How the workshop will be conducted:

This one day workshop on Arduino will be the second workshop in the IoT series. There will be interactions through A-VIEW at the beginning. After that, all participants at respective remote centres will learn to program a microcontroller, using Arduino Uno. Components like Arduino Uno, breadboard, sensors and other electronic components required for this workshop will be sent to every participating Remote Centres. There will be a total of three interaction sessions using A-VIEW. There will be about 5 hours available for practising Arduino and 2 hours for interactions, a detailed schedule of which will be sent to you later.

The participants of the main workshop have to pay Rs. 1,100/- to IIT Bombay to cover the cost of the above mentioned Arduino kit at the time of registration. A kit comprising the following will be given to every participant, which they can take home after the workshop:

Arduino Uno compatible board, 10+ resistors, breadboard, tricolour LED, red LED, 7 segment displays (2), 16x2 LCD display, decoder IC, potentiometer, L293D H-Bridge IC, toy motor, push button switches (2), buzzer, DHT11 temperature humidity sensor, ESP8266 wifi module, and all required cables, jumper wires, and a plastic box.

Participants will also have to pay a maximum of Rs. 400 to the RC directly on the day of the workshop, from which, RC will provide lunch and coffee / tea / snacks.

Procedure to participate in the workshop:

To participate in this workshop, please login to the website (https://www.it.iitb.ac.in/nmeict/). The registration portal for the workshop will open from **04 December to 13 December 2019**. **Please register early**, as we require two months for manufacturing and shipping the kit to Remote Centres. We may also not extend the registration date beyond 13 Dec. 2019.

Please <u>click here</u> to register for the Arduino workshop.

I request you to kindly send this email to the faculty/teachers of your nearby colleges/schools and educational institutions.

We look forward to your enthusiastic participation in this initiative.

Regards,

Prof. Kannan Moudgalya

Kons Moulto

PI, Pandit Madan Mohan Malaviya National

Mission on Teachers and Teaching (PMMMNMTT)