

## Registration Form

Name of the Applicant (first, last):

Father's Name:

Mother's Name:

Gender:

Date of Birth:

Designation:

Highest Qualification:

Name and Address of the Organization/Institute:

Postal Address:

Category : (GEN/OBC/SC/ST/Others):

City/town:

Email:

Phone Number:

Mobile Number:

Do you need accommodation?

(Yes/No):

Transaction ID (Applicable for Online

Transaction):

Signature of the Applicant:

Signature and Seal of the Forwarding Authority

Name:

Designation:

Note:

- The Faculty/Staff are requested to submit the NOC from respective department before attending the session.
- The Faculty member belonging to SC/ST Category need to carry caste Certificate(both in original & photocopy).
- The participant need to carry the Institute/Organization valid Identity Card (Both in Original & Photocopy).
- For hostel kindly requested to please call course coordinator (+91-9471173367)

Affix passport  
size  
photograph

## Course Coordinators from Academy

- Prof. Ratnajit Bhattacharjee**  
Principal Investigator, E&ICT Academy, IIT Guwahati.
- Dr. Gaurav Trivedi**  
Co-Principal Investigator, E&ICT Academy, IIT Guwahati.

## Expert from industry

- Mr. Yatish M**  
Country Manager, Digital Shark Technology.
- Mr. Mahesh B S**  
Application Engineer, TI India University Programme.
- Mr. Rajesh M**  
Application Engineer, TI India University Programme.

## How to reach NIT Manipur

Daily flights are available from Delhi, Kolkata and Guwahati with more than 3 flights daily. The Institute has two campus (Permanent and temporary). Permanent campus is located at Langol Lamphel and Temporary at Takyel. Both the campus are around 4-6 km from airport and within 3 km from bus stand. The Imphal City is also only 4-5 km from airport. Local Taxis and Autos are available at Airport and Bus stands.

## Organising Committee

### Patron

Dr. S. Birendra Singh – Director, NIT Manipur

### Chairman & Programme Co-ordinator

Dr. Ashish Ranjan , HOD, ECE Dept.

### Organising Secretary

Dr. L. Surajkumar Singh

### Members

Mr. Manoj Kumar  
Mrs. Chitralkha Ngangbam  
Mr. K. Pritamdas  
Mr. Huiem Tarunkumar  
Mrs. Kh. Jilenkumari  
Ms. Salam Devyani Devi  
Mr. Samom Jayananda  
Ms. Pink Khudrakpam  
Mr. Richard Ningthoujam  
Mr. Thingujam Churchil Singh  
Mr. Yumnam Shantikumar Singh  
Mr. Salam Nonglenkhomba Meitei  
Ms. Anupa Hijam  
Ms. Nameirakpam Debala Devi

## Registration Fee including GST

### Registration Fee (Including Course Material, Snacks and Lunch )

- Rs. 2,950/-** for Faculty, Lab Technicians, Project Staff, Research Scholars and Students.
- Rs. 1,475/-** for Faculty, Lab Technicians and Project Staff (SC/ST Category).
- Rs. 5,900/-** for Industry Personnel.

Note: For NIT Manipur participants, please contact  
Dr. Ashish Ranjan



सत्यमेव जयते

An Initiative of  
Ministry of Electronics & Information Technology

(MeitY),

Government of India  
Electronics & ICT Academy  
IIT Guwahati, Assam



A Faculty Development Programme on

“IoT: Gateway to Smart Future”



From 12-17 April, 2018  
In Association with NIT Manipur under

TEQIP III



& Support from TI University  
Programme



Last Date of Registration: 05.04.2018  
(Online Registration Link will be open from 24.02.2018)  
Venue: NIT Manipur

## Objective of the Course

This Faculty Development Programme is designed for faculty/professionals/students who want to sharpen their design and development skills. This programme includes extensive hands-on lab emphasizing the demonstration and application of techniques and skills. The Lab session is based on advanced microcontrollers from Texas Instruments and includes the following:

- MSP430 LaunchPad
- CC110L wireless BoosterPack
- Tiva-C series LaunchPad
- SensHub BoosterPack
- CC3100 Wi-Fi BoosterPack.

With all these tools in your hand you can design exciting applications which are relevant to the current industry requirements.

## Course Programme

Faculty Development Programme is split into three parts:

- Lectures.
- Labs/Hands-on sessions daily on Parallel Programming.
- Assignments and Project.

## Who Can Attend

Programme is open to Faculty Members, Research Scholars, PG & UG Students, Lab Technicians and Project Staffs from Universities, Colleges & Schools. Industry Personnel working in the concerned/allied discipline may also apply.

## Address of Correspondence for Workshop

### Dr. Ashish Ranjan

Assistant Professor, ECE Dept, NIT Manipur

Email: [ashish.ece@nitmanipur.ac.in](mailto:ashish.ece@nitmanipur.ac.in)

Phone: 9471173367

### Project Manager

E&ICT, IIT Guwahati

Email: [feroza.haque@iitg.ernet.in](mailto:feroza.haque@iitg.ernet.in)

Phone: +91 7086502139

Follow us on: [www.facebook.com/eictacadguwahati/](http://www.facebook.com/eictacadguwahati/)



**Contact Hours for the Course**  
**48 Hrs (Theory, Hands-on & Tutorial)**

## Course Outcome

The participants will be given a thorough understanding of the following topics:

- Internet of Things: IoT Overview, opportunities and challenges.
- Introduction to MSP430, Architecture, peripherals, Memory and Low Power Modes.
- SPI communication between two Msp4302553
- Real Time System Design.
- Architecture and Hands-on TM4C123GXL Launchpad.
- Hibernation and wakeup on an RTC Interrupt.
- Introduction and Setting up CC3100 Booster pack as Server.
- Generation of Cloud based calls user.

## Assignment and Project

1. Assignments will be of the following type:
  - MCQ based questionnaire.
  - Programming Assignments (Problem statement will be provided.)
2. At the end of the course "Project" will be assigned to the participants which would be an application development

## How to Apply

**Online** – The participants may log on to the E&ICT Academy, IIT Guwahati website: <http://eictacad@iitg.ernet.in> and fill up the google doc application form.

**Through Email** – Scanned copy of the filled in application form duly endorsed by the, forwarding authority is to be mailed at E&ICT Academy's email id ([eictacad@gmail.com](mailto:eictacad@gmail.com), [eictacad@iitg.ernet.in](mailto:eictacad@iitg.ernet.in)). Application format given in this brochure may also be downloaded from the website.

**Mode of Payment: Online Only**  
**(RTGS/NEFT)**

### For Online Transfer

**Bank Name: State Bank of India**  
**Account Name: IIT Guwahati R&D E&ICT Academy**  
**Account No.: 36071160089**  
**IFSC Code: SBIN0014262**  
**Bank Name: State Bank of India**  
**Bank Address: IIT Guwahati, GHY- 39.**

## Hands-on Session

The Hands-on session will include the following:

- Hands-on Msp430G2553 launchpad and Energia.
- Interfacing DC Motor using potentiometer, PWM generation.
- Energia WiFi libraries WiFi class APIs.
- Configure launchpad as access point.
- Getting started with CC3100 sdk on ccsv6, Send Email and Application.
- Introduction to Grove kit for launchpad & Interfacing sensors.
- Getting started with Temboo and Nexmo Cloud service providers.
- Getting started with Pubnub and visualize real time sensor readings using Freeboard.
- Analog to digital conversion Using Tivaware API Interrupts of ADC.

## About NIT Manipur

NIT Manipur started its first session with the three branches of Engineering-Electrical & Electronics Engineering, Electronics & Communication Engineering and Computer Science & Engineering. It is presently functioning in its temporary Campus at Takyelpat, Imphal. The institute has acquired 341.5 acres of land in lush green areas of Langol, Imphal.

## About E&ICT Academy

Electronics and ICT Academy is an initiative of Ministry of Electronics & Information Technology (MeitY), Govt. of India for Faculty/ Research Scholar Development Programme.

Academy has planned short term training programmes on fundamental and advanced topics in IT, Electronics & Communication, Product Design, Manufacturing with hands on training and project work.

## Contact Details

For more details or any queries please contact

Project Manager,

E&ICT Academy, IIT Guwahati

Email: [eictacad@iitg.ernet.in](mailto:eictacad@iitg.ernet.in), [eictacad@gmail.com](mailto:eictacad@gmail.com)

Phone No: +91-3612583182/3009

Mobile No: +91 7086502139

(Working Hours 9:30 am to 5:30 pm)