

Registration Form

Name of the Applicant (first, last):

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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:

i) The Faculty/Staff are requested to submit the NOC from respective

department before attending the session.

ii) The Faculty member belonging to SC/ST Category need to carry caste

Certificate(both in original & photocopy).

iii) The participant need to carry the Institute/Organization valid Identity

Card (Both in Original & Photocopy).

iv) A limited number of shared accommodation is available on payment

basis. Please mail your request to arnab.maji@gmail.com

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

- Experienced experts from Industry will provide hands-on training to the participants

Organizing Committee Members

- **Vice-Chancellor, NEHU**
Patron-in-Chief
- **Dean, School of Technology, NEHU, Shillong**

Patron

- **Dr. A.K. Maji**, Assistant Professor, IT, NEHU

Co-Ordinator

- **Dr. D. Kandar, Head, Deptt. Of IT, NEHU**

General Chair

Program Committee Members

- **Dr. B. Bhuyan**, Associate Professor, IT, NEHU
- **S. Das**, Assistant Professor, IT, NEHU
- **S. C. Sahana**, Assistant Professor, IT, NEHU

Accommodation Committee

- **K. Amitab**, Assistant Professor, IT, NEHU
- **N.R. Paul**, STA, IT, NEHU

Local Hospitality Committee

- **Dr. Md. I. Hussain**, Associate Professor, IT, NEHU
- **A. Nath**, Assistant Professor, IT, NEHU
- **S. Neog**, Assistant Professor, IT, NEHU

About IT Department, NEHU, Shillong

The Department of Information Technology (IT) instituted in the year of 2006, under the School of Technology, NEHU, funded by MHRD, Govt. of India, with a prime focus to impart quality, career-oriented engineering education in order to produce bright technologist from different parts of the country. The Department is currently offering B.Tech, M.Tech and Ph.D. courses in Information Technology. Currently the Department has five well-equipped state-of-art computer laboratories, 240 state-of-art desktops and high-end servers.



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

“Security Issues & Challenges of Internet of Things (IoT)”



from 10 - 14 Sep, 2018

In Association with
Department of IT,

North-Eastern Hill

University

&

Support from TI

University

Programme



Registration Fee including GST

Registration Fee (Including Course Material, Snacks and Lunch)

- Rs. 2,950/- for Faculty, Lab Technicians and Project Staff.
- Rs. 1,475/- for ST/SC Faculty.
- Rs. 5900/- for Industry Personnel, Research scholars and Students.

Last Date of Registration: 06.09.2018

(Online Registration Link will be open from 03.08.2018)

Venue: Advanced Computing Lab, Deptt. Of IT, NEHU

Objective of the Course

This Faculty Development Program is designed for faculty /professionals /students who want to sharpen their design and development skills. This program includes extensive hands-on lab emphasizing the demonstration and application of IoT techniques and skills mainly emphasizing on security issues in IOT. Crypto Connected LaunchPad gives a platform to develop high performance, data protected, connected IoT applications from secure cloud connection

Course Outcome

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

- Internet of Things: IoT Overview, opportunities and challenges.
- Introduction to TIVA, Architecture, peripherals, Memory and Low Power Modes.
- Hibernation and wakeup on an RTC Interrupt.
- Real time sensing applications.
- IoT Applications using different cloud service providers like Pubnub, Freeboard etc.
- Security issues in Internet of things.
- Secure IoT applications.

Course Programme

Faculty Development Programme is split into two parts:

- Lectures.
- Assignments, Hands On and Project.

Topic to be Covered

The hands-on session will include the following topics

- ARM Cortex M4F Architecture and different peripherals like UART, ADC etc in TIVA launchpad
- Opportunities, Challenges and Security issues in Internet of Things
- Introduction to Grove Kit for launchpad and interfacing sensors
- Getting started with Pubnub and visualize real time sensor readings using Freeboard
- Advanced Encryption/Decryption (AES) Algorithms using cipher block chaining (CBC), Electronic code Book (ECB), Galois/Counter (GCM) mode
- Secured cloud connection out-of-box demonstration with TI RTOS, WolfSSL library and Exosite.
- Transport Layer Security/Secure Sockets Layer (TLS/SSL) protocol to connect an IoT product to a cloud server securely

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.

Assignment and Project

1. Assignments will be MCQ based questionnaire.
2. At the end of the course "Project" will be assigned to the participants which would be an application development

Contact Details

For more details or any queries please contact
Project Manager,

E&ICT Academy, IIT Guwahati

Email: eictacad@iitg.ernet.in,

eictacad@gmail.com

Phone No: +91-3612583182/3009

Mobile No: +91 7086502139

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

<https://www.facebook.com/eictacadguwahati>



How to Apply

Online – The participants may log on to the E&ICT Academy, IIT Guwahati

Website:

http://www.iitg.ernet.in/eictacad/faculty_development.html

and fill up the appropriate registration 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, eictacad@iitg.ac.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.

About E&ICT Academy & IIT Guwahati

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.

Indian Institute of Technology Guwahati, the sixth member of the IIT fraternity, was established in 1994. The academic programme of IIT Guwahati commenced in 1995.



About Digital Shark Technology

Digital Shark Technology is a provider of products, services and solutions to Academic, industrial and commercial users of electronic components and enterprise computing solutions. The company serves multiple suppliers & OEMs, contract manufacturers and commercial customers across the country.

This Company offers a wide spectrum of products and a broad range of services and solutions, including materials planning, design services, programming and assembly service and a variety of online support services.

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