

## Registration Form

Name of the Applicant (first, last):

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Fathers Name:.....

.....

Mothers Name:.....

Gender: .....

Category(Gen/ST/SC).....

Date of Birth:.....

Designation: .....

Highest Qualification: .....

Name and Address of the Organization/Institute:.....

.....

City/town:.....

Postal Address:.....

Email:.....

Phone Number:.....

Mobile Number:.....

Do you need hostel accommodation? (Yes/No):.....

Transaction ID (Applicable for Online Transfer):.....

Signature of the Applicant:.....

Signature and Seal of the Forwarding Authority

Name .....

Designation .....

Affix passport size  
photograph

### 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) Hostel will be available at IIT Guwahati. Please drop an email if hostel is required. For Guest house one month prior intimation is required. (Guest House booking is subjected to the availability of rooms).

## Registration Fee

### Registration Fee

(Including Course Material, Snacks and Lunch )

- **Rs. 1,000/-** for Faculty, Lab Technicians and Project Staff
- **Rs. 1,500/-** for Industry Personnel, Research Scholars and Students.

## 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.

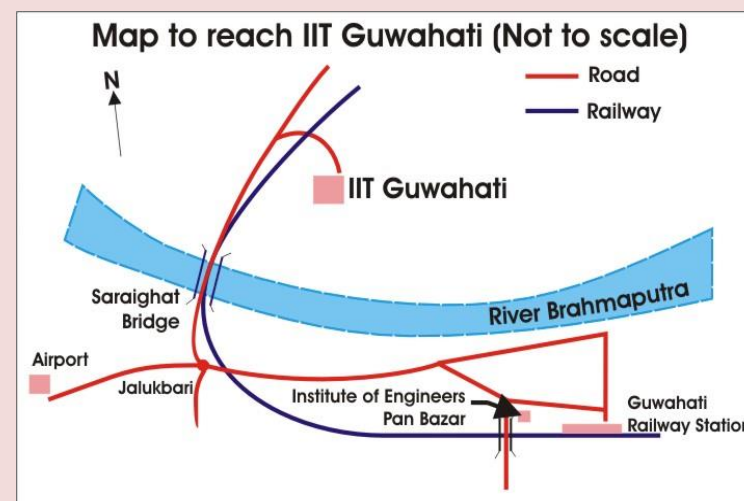
## Expert from Industry

- **Aashish Pandey**  
Technical Consultant, Kovid Academy.

## How to Reach IIT Guwahati

IIT Guwahati is located just on the outskirts of the city of Guwahati and is well connected to other parts of the country by road, rail or air. There are direct air services from/to Mumbai, New Delhi and Kolkata with connectivity to all major cities. For information of trains to Guwahati please visit the Indian Railways website [www.indianrail.gov.in](http://www.indianrail.gov.in). For commuting from the station to the North Guwahati IIT campus bus service is available from G.N.B. road, Panbazar as per the schedule which can be downloaded from the following link:

<http://www.iitg.ac.in/aa/pages/campusmap/files/bus-timings-2010.pdf>



An Initiative of Ministry of Electronics &  
Information Technology (MeitY),  
Government of India



Electronics & ICT Academy  
IIT Guwahati, Assam



**A Three day Workshop on**

## Brainwave Robotics



Organized with support from  
**Kovid Academy**



Course Date: 26 - 28 March, 2018

Last Date of Registration: 18.03.2018

(Online Registration Link will be open from 06.02.2018)

Venue: IIT Guwahati

## Course Outcome

The participants are expected to understand:

- EEG Technology
- Brainwave Technology & Robotics
- Types of Brainwaves
- Sensors to record Brainwaves
- Types of Autonomous Robots
- Wireless Communication
- Elements of an autonomous robot
- Microcontroller based robots
- Pre-programmed robots
- Self-learning robots
- Artificial Intelligence and Robotics

## Assignments and Project

Assignments will be of the following type:

- Lecture sessions
- Instructor led hands-on sessions with 30% lecture and 70% hands on a daily basis
- MCQ model reviews for each topic
- Assignments and Projects

## Preferred Pre- Requisites for the Course

The preferred pre-requisites for the course are:

- Basic Electronics.

## Hands-on Topics

Lab sessions

- Analyzing brainwave data using MATLAB
- Stress Signal Detection
- Detecting Eye blink and controlling actuators

**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.**

## Topics Covered

Following topics will be covered during session :

- Robots and their types
- Preprogrammed robots
- Self-learning robots
- EEG Technology
- Brainwave Technology & Robotics
- Microcontroller & Arduino
- Wireless Communication & Interfacing EEG Device
- Connecting Arduino with EEG Brain sense Device
- Analyzing brainwave data using MATLAB
- Designing Algorithms for Eye Blink
- Stress Signal Detection
- Advance Robotics
- Artificial Intelligence and Robotics

## About E&ICT 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 using latest software tools and systems.

In addition, the Academy will conduct specialized/customized training programmes and research promotion workshops for corporate sector & educational institutions.



## Objective of the Course

Course Objective is to provide basic knowledge in Robotics, EEG Sensor, Artificial Intelligence. The programme will focus on practical aspects and include examples which are relevant to the current industry requirements.

Lab sessions will include the following:

- EEG Sensor
- Controlling speed of motors using PWM Manipulation
- Connecting Arduino with EEG Brain sense Device
- Analyzing brainwave data using MATLAB
- Detecting Eye blink and controlling actuators
- Programming Algorithms & Artificial Intelligence

### Contact Hours for the Course

**24 Hrs (Theory, Hands-on & Tutorial)**

## 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.

## 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.

## Contact Details

**For more details or any queries please contact  
Programme Manager, EICT Academy  
IIT Guwahati**

**Email: [eictacad@iitg.ernet.in](mailto:eictacad@iitg.ernet.in), [eictacad@gmail.com](mailto:eictacad@gmail.com)  
Phone No: +91-3612583009/3182/2503/2536**

**For details of the programme and course contents etc., please log on to Electronics and ICT Academy website: <http://eict.iitg.ernet.in/>**