

Course Objective

Course Objective is to make the participants aware of Basic machine learning techniques and the programming behind the machine learning techniques.

To understand how to implement the machine learning techniques in the electricity domain. The participants will garner knowledge on intuition behind basic machine learning concepts and applications.

Course Outcome

This programme aims towards helping participants understand the following-

- Introduction to machine learning (supervised and unsupervised learning), python (pandas and numpy)
- Exploratory data analysis and data visualization
- Unsupervised learning technique – clustering by KMeans
- Supervised learning technique – Regression – simple and multiple linear regression
- Classification introduction – Logistic regression – metrics for classification – confusion matrix
- Decision trees and random forest – over fitting – under fitting
- Boosting techniques

Activities & 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 will be based on the Practical Case Studies.

Contact Details

Project Manager,

E&ICT Academy, IIT Guwahati

Email: eictacad@iitg.ac.in, eictacad@gmail.com

eictinfo.iitg@gmail.com

Follow us on: www.facebook.com/eictacadguwahati/

Website: <http://eict.iitg.ac.in/>



Contact Hours for the Course

40 Hrs (Theory, Activities, Practices Session & Evaluation)

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.*

Organizing Committee from BCE

Patron

- **Prof. Achintya**, Principal, BCE Bhagalpur
Coordinators
- **Mr. Amitesh Prakash**
Ph: 9570947830, Email: amitesh.nitjsr1@gmail.com
- **Mr. Anish Kumar**
Ph: 9162466349, Email: anishjsr.ak@gmail.com

Who Can Attend?

- Faculty and PhD Research Scholar

Pre-requisites

- Prior Knowledge of programming (java/C/C++/python), basics of statistics and probability.
- Installation of Anaconda 3.7 Software.
- Installation of Google Chrome.
- Min 8GB RAM, 60 GB hard drive free space, 64 bit OS, Windows 7/8/10
- Good Speed Internet connection for hands-on sessions.

How to Apply?

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

http://eict.iitg.ac.in/faculty_development.html and fill up the google doc application form.

Registration Fee

- **Rs. 1250/- (Inclusive of GST) for Faculty, PhD Research Scholar**

Mode of Payment: Online Only (NEFT/RTGS)

For Online Transfer

Bank Name: State Bank of India

Account Name: IIT Guwahati R and D E and ICT Academy

Account No.: 36071160089

IFSC Code: SBIN0014262

Bank Name: State Bank of India

Bank Address: IIT Guwahati, GHY- 39.



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



**Electronics & ICT Academy
IIT Guwahati, Assam**



Online

01 Week Faculty Development Programme

**Machine Learning and its Application in
Electricity
(22 - 29 June, 2020)**



Organized in Association with

**Bhagalpur College of Engineering (BCE),
Bhagalpur**



&

**Support from
Techvictus**



Course Date: 22 - 29 June, 2020

Last Date of Registration: 15 June 2020

(Online Registration Link will be open from 04/06/2020)

Per Day Timing: 10:00 am - 01:00 pm & 03:00 pm – 05:00 pm