

# FACULTY DEVELOPMENT PROGRAM

On

## Big Data with Hadoop

Under the aegis of

Electronics & ICT Academy

IIT Roorkee



In Association with

Graphic Era Hill University, Dehradun  
(Uttarakhand)



**Graphic Era**  
HILL UNIVERSITY  
Established under section 2(f) of UGC Act, 1956

Sep 23, 2017 - Sep 29, 2017

### Experts from Academia/Industry

Dr. Sudip Roy,  
CSE Dept  
IIT Roorkee

Sai Kumar. P.  
(Kovid Academy)  
Industry Expert



Supported by

Ministry of Electronics & Information Technology  
Government of India



Venue

Graphic Era Hill University, Dehradun  
(Uttarakhand)

## Objective of the Course

- To apply traditional data analytics and business intelligence skills to big data tools like Apache Impala (incubating), Apache Hive, and Apache Pig.
- Cloudera presents the tools data professionals need to access, manipulate, transform, and analyze complex data sets using SQL and familiar scripting languages.

## Benefits and Outcomes of the Course

- Course provides participants with a comprehensive understanding of all the steps necessary to operate and maintain a Hadoop cluster using Cloudera Manager.
- With Spark, developers can write sophisticated parallel applications to execute faster decisions, better decisions, and interactive actions, applied to a wide variety of use cases, architectures, and industries. Apache Spark examples and hands-on exercises are presented in Scala and Python.

## Program Features

- The program is split into lectures and lab sessions.
- Quizzes and project work for enhanced learning.
- Hands-on experience on basic & advanced-level topics.
- Interaction & learning with experts from academia & industry.
- Certificates to the participants by E&ICT Academy IITR.

## Focus Area

- Introduction to Hadoop
- The Hadoop Distributed File System (HDFS)
- MapReduce and Spark on YARN
- Hadoop Cluster Installation
- Getting Data into HDFS
- Installing and Configuring Hive & Impala
- Hadoop Clients Including Hue
- Interacting with Pig
- Processing Complex Data with Pig
- Multi-Dataset Operations with Pig
- Introduction to Hive and Impala
- Querying with Hive and Impala
- Getting Data into HDFS
- Complex Data with Hive and Impala
- Apache Spark Basics
- Aggregating Data with Pair RDDs
- Writing, Running, & Configuring Apache Spark Apps
- Parallel Processing in Apache Spark
- RDD Persistence
- DataFrames and Spark SQL
- Message Processing with Apache Kafka
- Capturing Data with Apache Flume

## Coordinators

Dr. Sudip Roy,  
CSE Dept  
IIT Roorkee

Dr. Sanjeev Manhas, P.I.  
E&ICT Academy, ECE Dept,  
IIT Roorkee

Amit Gupta  
CSE Dept

Graphic Era Hill University



## Who Can Attend ?

Program is open to faculty members/research scholars/PG students from colleges/universities, and industry personnel working in the concerned/allied discipline.

## Registration Fee

Faculty members/Research scholars: ₹ 2,000/-  
Industry person: ₹ 5,000/-  
(without accommodation)

## Payment Details

DD in favor of "Dean SRIC IIT Roorkee" payable at Roorkee  
"OR"

Make Online Payment by NEFT/RTGS on given detail

Account Name: Research Project, IIT Roorkee  
Account Number: 33012172097  
IFSC code: SBIN0001069

## How to Apply

Step 1: Make Payment

Step 2: Participants may fill registration form through Academy website (<http://eict.iitr.ac.in>).  
OR

Step 2: Send a duly filled-in registration form along with Demand Draft to Academy address.

Mr. Prateek Sharma, EICT Academy, ECE Department, IIT Roorkee-247667

## Important Dates



**Last Date For Online  
Registration:  
21st Sep 2017**

**Last Date For Receiving  
Application: 22nd Sep 2017**



## EICT Academy IITR

Electronics and ICT Academy (E&ICT) at IIT Roorkee (funded by Ministry of Electronics and Information Technology) aims to enrich and upgrade teaching and research competences of engineering faculties of institutes/colleges by conducting courses and workshops in fundamentals as well as emerging areas of E&ICT and enabled areas. The programs are conducted by well-known industry partners, resource persons from leading academia and experts from renowned R&D organizations.



## Activities of the Academy

- Specialized training on basic and advanced level topics with hands-on experience in the emerging areas of Electronics & ICT.
- Setup the activity centers to conduct FDPs locally at institutes/colleges.
- Curriculum development for the industry.
- Continuing Education Programme for students/working professionals.
- Design, develop and delivery of specialized modules for specific research areas in industry.

Faculty Development Program  
on

"Big Data with Hadoop"

Sep 23, 2017 - Sep 29, 2017



## REGISTRATION FORM

Applicant Name \_\_\_\_\_

Gender: \_\_\_\_\_

Category (GEN/OBC/SC/ST): \_\_\_\_\_

Designation: \_\_\_\_\_

Name and Address of the  
Organizatio/Institute: \_\_\_\_\_

City/Town: \_\_\_\_\_

Email: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Do you need Accommodation?  
(Yes/No): \_\_\_\_\_

DD Number: \_\_\_\_\_

Date: \_\_\_\_\_

Issuing Bank: \_\_\_\_\_

Payable at: \_\_\_\_\_

Signature of the Applicant

## Contact Us

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