

### National Institute of Electronics & Information Technology Gorakhpur - Extension Centre Lucknow



(Under Ministry of Electronics and Information Technology, Govt. of India) MMMUT Campus, Deoria Road, Gorakhpur-273010 http://www.nielit.gov.in/gorakhpur/

# Certificate course in Big Data Analytics Using Hadoop

4 Weeks (2Hrs. per day)

### Course in Big Data Analytics Using Hadoop

#### 4 Weeks Online Course

# **Objective**

The Big Data Hadoop Training Course is proposed to give all around learning of the Big Data framework using Hadoop, HBase, Hive, Sqoop and PIG. After the completion of this course students may work as a Big Data Analyst, Big Data Consultant, Manager etc.

B.E./B.Tech., M.Sc.(IT/ computer Science), MCA, BCA, PGDCA, DOEACC A, B level, Three Years Diploma in Computer Science.



# **Prerequisite**

- ✓ Candidate must have latest computer/laptop with preferably 16 GB RAM and Operating System of 64bit.
- Software: Notepad, JDK, Eclipse 64 Bit, Cloudera Hadoop (can be downloaded from respective websites).
- ✓ Internet connection with good speed (preferably 2 Mbps or higher)

Rs. 2200/- incl. GST& all other charges

**Course Fees** 

#### Certificate

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted at the end of the course.

- ✓ Instructor-led live classes.
- ✓ Instructor-led hands-on lab sessions.
- ✓ Content Access through e-Learning portal.
- ✓ Assessment and Certification

Methodology

- **Step-1:** Read the course structure & course requirements carefully.
- **Step-2:** Visit the Registration portal and click on apply button.
- **Step-3:** Create your login credentials and fill up all the details, see the preview and submit the form.

**Step-4:** Login with your credentials to verify the mobile number, email ID and then upload the documents, Lock the profile and Pay the Fees online, using ATM-Debit Card / Credit Card / Internet Banking / UPI etc.

**How to Apply?** 



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#### **Course Content**

Day	Topic	Da y	Topic	Day	Topic
Day #01	Big Data Overview, What is Big Data?, Benefits of Big data, Big Data Challenges, What is Hadoop?, Hadoop Big Data Solution, prerequisites	Day #02	What is Java, What is JVM, What is JRE & JDK Java Keywords & Operators, Data types & Variables	Day #03	Conditional Statement in Java, Java String, Arrays, Java Loops, OOPS Concepts, What is class
Day #04	Methods in java, new Keyword in java, Method overloading, What is Constructor, static keyword, this keyword, Inheritance	Day #05	Polymorphism in java, Abstraction in java, Interface in java, Overriding, Encapsulation	Day #06	Package in java, Access Modifier in java, Abstract Method, Super Keyword, Interfaces, Exceptions
Day #07	Hadoop Fremework, Modules of Hadoop, Mapreduce, Mapreduce Job, Mapper, Reducer	Day #08	Mapreduce Data Flow, HDFS	Day #09	Hadoop Installation through Virtual Machine and Cloudera, Installation of Bitwise SSH Client
Day #10	Hadoop Command, Namenode, Datanode, YARN	Day #11	What is HBase, Limitation of Hadoop, Difference between HBase and HDFS, Storage Mechanism in HBase	Day #12	HBase Architecture, HBase Shell, HBase Commands, Create Table, HBase Describe and Alter
Day #13	HBase Drop Table, Shutting Down, Create Data, Update Data, Read Data, Delete Data, Scan, Count and Truncate	Day #14	What is Hive?, Characteristics of Hive, Hive vs RDMS, Hive Architecture, Hive Client, Services, Storage and Computing, Job Execution Flow	Day #15	Data types in Hive, Create Database, Drop Database, Create Table, Alter Table, Table Types-Internal and External
Day #16	What is Sqoop?, Creating MySql Table, Adding Information to MySql, Import Table MySql to Hadoop using Sqoop	Day #17	Sqoop import command with target directory, Sqoop import command with where clouse, Sqoop import all table, list database, Sqoop Export	Day #18	What is Apache Pig, Need of Apache Pig, Pig vs Mapreduce, Pig vs Hive, Pig Architecture, Pig Components
Day #19	Pig Latin Data Model, Pig Execution Mechanism, Grunt Shell, Pig Latin Statement, Data Types, Reading Data	Day #20	Loading into Apache Pig using LOAD operator, Diagnostic Operators, Group Operators, Join Operator, Cross Operator, Union Operator, Split Operator, Filter Operator, Text Loader		

# **Course Coordinator**

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**CLICK HERE TO REGISTER**