



## Academic Year 2022 - 23

**Course name:** - Big Data Technology and Application

**Duration:** - 2nd Jan to 6th Jan 2023

**Venue:** - VIVA Institute of Technology

**Co-ordinator:** - Prof. Saniket Kudoo

**Enrolled students:** - 24

### Course Objective:-

1. Understand the Big Data Platform and its Use cases
2. Provide an overview of Apache Hadoop
3. Provide HDFS Concepts and Interfacing with HDFS • Understand Map Reduce Job
4. Provide hands on Hadoop Eco System
5. Apply analytics on Structured, Unstructured Data.
6. Exposure to Data Analytics with R.

### Course Outcomes: -

After successful completion of the course, the students are able to

1. Identify Big Data and its Business Implications.
2. List the components of Hadoop and Hadoop Eco-System
3. Access and Process Data on Distributed File System
4. Manage Job Execution in Hadoop Environment
5. Develop Big Data Solutions using Hadoop Eco System
6. Analyze Infosphere BigInsights Big Data Recommendations.
7. Apply Machine Learning Techniques using R.

### Course Schedule: -

Days	Morning Session (9 am to 12 pm)	Afternoon Session (1 pm to 4 pm)
1	INTRODUCTION TO BIG DATA AND HADOOP	Hadoop installation tutorial
2	Introduction to PIG, Execution Modes of Pig	Hive Shell, Hive Services, Hive Metastore
3	HBasics, Concepts, Clients	Hbase Versus RDBMS, Assignment
4	Big SQL : Introduction	Machine Learning : Introduction, Supervised Learning,
5	Big Data Analytics with BigR.	Doubt solving session





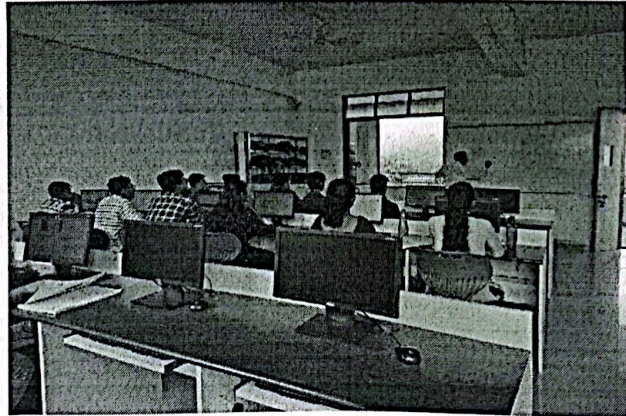
**Report:-**

Computer Engg. the department of VIVA Institute of Technology conducted a course on "Big Data Technology and Application" for third-year and final-year students. A total of 24 students had been enrolled in this course.

This course was conducted by Prof. Saniket Kudoo in order to provide advanced knowledge of big data technology and all other concepts related to this. This was 30 hrs. certificate course.

During the course, students learned about Hadoop. Also, the installation of a Hadoop session is conducted. They learned about design models and methodology. Also, students study big SQL and big data with BigR.

Students enjoyed the course and completed it successfully.



**CO-PO Mapping: -**

Course Outcome	Program Outcome											
	P O1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	P O9	PO 10	PO 11	PO 12
CO 1	3	-	-	-	-	-	-	-	-	-	-	-
CO2	3	-	-	-	-	-	-	-	-	-	-	-
CO3	-	-	3	-	-	-	-	-	-	-	-	-
CO4	-	-	-	3	-	-	-	-	-	-	-	-
CO5	-	3	-	-	-	-	-	-	-	-	-	-





CO6	-	-	-	3	-	-	-	-	-	-	-	-
CO7	-	-	-	-	3	-	-	-	-	-	-	-

**CO PO Justification: -**

COs	POs	Justification
CO1	PO1	Strongly mapped as the students will be able to Identify Big Data and its Business Implications.
CO2	PO1	Strongly mapped as the students will be able to List the components of Hadoop and Hadoop Eco-System
CO3	PO3	Strongly mapped as the students will be able to Access and Process Data on Distributed File System
CO4	PO4	Strongly mapped as the students will be able to Manage Job Execution in Hadoop Environment
CO5	PO2	Strongly mapped as the students will be able to Develop Big Data Solutions using Hadoop Eco System
CO6	PO4	Strongly mapped as the students will be able to Analyze Infosphere BigInsights Big Data Recommendations
CO7	PO5	Strongly mapped as the students will be able to Apply Machine Learning Techniques using R.

Sunita Naik

In charge HOD, Computer Engg.

QR Code for Certificates -

