



**Bharath**  
**INSTITUTE OF HIGHER EDUCATION AND RESEARCH**  
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)



**SHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY**  
No.173, Agharam Road, Selayur, Chennai , T.N - 600 073.

**Requisition Letter**

Date:31.03.2021

From  
Dr. K.P.Kaliyamurthie,  
Professor & Head,  
Department of CSE,  
Bharath Institute of Higher Education and Research,  
Chennai

To  
PRO VICE CHANCELLOR,  
Bharath Institute of Higher Education and Research,  
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on “**RECENT TRENDS IN BIG DATA ANALYTICS**” -(ONLINE) -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on “**RECENT TRENDS IN BIG DATA ANALYTICS**” in our campus premises from **6.04.2021**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing : 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT  
Department Of Computer Science & Engg.,  
Bharath Institute Of Higher Education & Research  
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)  
Chennai - 600 073. INDIA

**DEAN ENGINEERING**  
**DEAN (Engineering)**  
Bharath Institute of Science & Technology  
**BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH**  
(Declared as Deemed to be University U/S 3 of UGC Act. 1956)  
Selayur, Chennai-600 073.



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## CIRCULAR

2.04.2021

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of RECENT TRENDS IN BIG DATA ANALYTICS** for the benefit of students. This course is scheduled from 6.04.2021 to 17.04.2021. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	Name of the Faculty	Designation
1	Dr. C. Nalini	Professor
2	Ms. Sani Gowtham	Assistant Professor

  
**Head of Department**

To

Copy to CSE

Copy to IT

**HEAD OF DEPARTMENT**  
Department Of Computer Science & Engg.,  
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## **CERTIFICATE COURSE ON RECENT TRENDS IN BIG DATA ANALYTICS**

**Date of Introduction of the Course: 9.05.2021**

### **COURSE SYLLABUS**

#### **1. Introduction to Big data**

To learn and analyse Big Data which is a collection of data that is **huge in volume, yet growing exponentially with time.**

#### **2. Understanding Big Data Storage**

Demonstrates a conceptual understanding of collection and management of large datasets.

#### **3. Introduction to HDFS Architecture**

HDFS is a distributed file system that handles large data sets running on commodity hardware.

#### **4. Map Reduce Programming Model**

Map Reduce is a programming model for processing large data sets with a parallel, distributed algorithm on a cluster. Introduction to Map Reduce Programming Model.

#### **5. Advanced Analytical Theory and Methods**

Describes effectively, and in context with Advanced analytic techniques include those such as **data/text mining, machine learning, pattern matching, forecasting, visualization, semantic analysis, sentiment analysis, network and cluster analysis**, multivariate statistics, graph analysis, simulation, complex event processing, neural networks.

#### **6. Overview of Clustering and Classification**

Understanding clustering and classification techniques.

#### **7. Association rules**

Association rule mining, at a basic level, involves the use of machine learning models to analyze data for patterns, or co-occurrences, in a database.

#### **8. Introduction to Recommendation system**

A recommender system is a type of information filtering system.

#### **9. Introduction to Stream concepts**

Big data streaming is a process in which big data is quickly processed in order to extract real-time insights from it.

#### **10. NOSQL DATA MANAGEMENT FOR BIG DATA**

NoSQL is a better choice for businesses whose data workloads are more geared toward the rapid processing and analyzing of vast amounts of varied and unstructured data, aka Big Data

#### **11. Visualization**

Data visualization is the graphical representation of information and data

## COURSE OBJECTIVES

To learn and analyse and visualize the process of inspecting, cleansing, transforming, and modelling data with the goal of **discovering useful information, informing conclusions, and supporting decision-making.**

**Specifically, the course has the following objectives:**

**Students will learn**

1. To study the basic technologies that forms the foundations of Big Data.
2. To study the programming aspects of cloud computing with a view to rapid prototyping of complex applications.
3. To understand the specialized aspects of big data including big data application, and big dataanalytics.
4. To study different types Case studies on the current research and applications of the Hadoop and big data in industry.



**COURSE COORDINATOR**



**HEAD OF THE DEPARTMENT**

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Department Of Computer Science & Engg.,  
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## CERTIFICATE COURSE ON RECENT TRENDS IN BIG DATA ANALYTICS

Date of Introduction of the Course: 09.05.2021

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN)  
Saturday (FN&AN).

### Time Table & Lesson plan

CLASS	DATE	TOPIC
1	6-04-2021(FN)	<b>1.Introduction to Big data</b> To learn and analyse Big Data which is a collection of data that is huge in volume, yet growing exponentially with time.
2	7-04-2021 (FN)	<b>2. Understanding Big Data Storage</b> Demonstrates a conceptual understanding of collection and management of large datasets.
3	8-04-2021 (FN)	<b>3. Introduction to HDFS Architecture</b> is a distributed file system that handles large datasets running on commodity hardware.
4,5	9-4-2021 (FN & AN)	<b>4. Map Reduce Programming Model</b> Map Reduce is a programming model for processing large data sets with a parallel, distributed algorithm on a cluster. Introduction to Map Reduce Programming Model.
6	11-04-2021 (FN)	<b>5. Advanced Analytical Theory and Methods</b> Describes effectively, and in context with Advanced analytic techniques include those such as data/text mining, machine ext
7	12-04-2021 (FN)	<b>6. Overview of Clustering and Classification</b> . Understanding clustering and classification

8	13-04-2021 (FN)	<b>7. Association rules</b> Association rule mining, at a basic level, involves the use of machine learning models to analyze data for patterns, or co-occurrences, in a database.
9	14-04-2021 (FN)	<b>8. Introduction to Recommendation system</b> A recommender system is a type of information filtering system.
10	15-04-2021 (FN)	<b>9. Introduction to Stream concepts</b> Big data streaming is a process in which big data is quickly processed in order to extract real-time insights from it
11, 12	16-04-2021 (FN & AN)	<b>10. NOSQL DATA MANAGEMENT FOR BIG DATA</b> NoSQL is a better choice for businesses whose data workloads are more geared toward the rapid processing and analyzing of vast amounts of varied and unstructured data, aka Big Data.
13.	18-04-2021 (AN)	<b>11. Visualization</b> Data visualization is the graphical representation of information and data

  
**COURSE COORDINATOR**

  
**HEAD OF THE DEPARTMENT**

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(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4<sup>th</sup> July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING		
RECENT TRENDS IN BIG DATA ANALYTICS		
B.Tech Computer Science and Engineering (2020-2021)		
S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMAR GUPTA
3	U15CS003	ABHISHEK KUMAR SINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMAR SINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVA VINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMAR YADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA
25	U15CS025	BINGEWAR
26	U15CS026	BIRADAVOLU SUCHARITHA
27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
29	U15CS029	BRYAN STEVE PUSHPARAJI
30	U15CS030	CHAKKA KSHITHIJA

31	U15CS031	CHAMARTHI LAKSHMI NARAYANA AVINASH
32	U15CS032	CHANDRA KANT CHOUDHARY
33	U15CS033	CHAPPIDI LAKSHMIKANTH REDDY
34	U15CS034	CHIDIPOTHU PRATHYUSHA
35	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
36	U15CS036	CHOWDHARY PRASANNA KUMAR
37	U15CS037	CHUNDI VENKATA SESHASAI RAMANAPATANJALI
38	U15CS038	CILLA SAI KISHORE
39	U15CS039	D N S HRUDAY BHARADWAJ
40	U15CS040	DADAM CHAITHRA
41	U15CS041	DEEPAK KUMAR SINGH
42	U15CS042	DILLIGANESH V.
43	U15CS043	DIVAKAR M
44	U15CS044	DIVYA VANI T
45	U15CS045	DODDI PUJITHA
46	U15CS046	DOOLIGANTI AKHIL REDDY

*S. S. S.*  
COURSE CO-ORDINATOR

*[Signature]*  
HOD  
HEAD OF DEPARTMENT  
Department Of Computer Science & Engg.,  
Bharath Institute Of Higher Education & Research  
(Declared as Deemed to be University U/S 2 Of UGC Act, 1956)  
Chennai - 600 073. INDIA



# COURSE FEEDBACK FORM

Academic Year		2020-2021								
Term										
Course Number										
Course Title		Recent Trends In Big Data Analytics								
Number of Credits										
Type of Course	Regular		Elective		Add-on				✓	
<b>I. Information on the Respondent: (Tick (✓) Appropriately)</b>										
1. Percentage of classes attended										
	0-20		20-40		40-60		60-80		80-100	✓
2. Number of hours per week spent on the course (Other than lecture hours)										
	0-2		2-4		4-6		6-8	✓	8-10	
3. Preparation for the course by the student:										
(i)	Have done part of this course earlier								No	
(ii)	Has adequate prior exposure to the prerequisites								Yes	
(iii)	Had to pickup relevant additional topics through concurrent study								No	
(iv)	Have no exposure to the background material								Yes	
4. The expectations for taking the course by the student are:										
(a)	Enhance by skill base in the area of specializations								Yes	
(b)	Get exposed to a relevant subject								Yes	
(c)	Curiosity								No	
(d)	Better Employment Opportunity								Yes	
(e)	Complete Course requirements								Yes	
(f)	To Improve CGPA								Yes	
<b>About the Instructor: Information on the Respondent: (Tick (✓) Appropriately)</b>										
				B	C	D	E			
1.	Pace of the Teaching/lecture			✓						
2.	Comment of the Subject			✓						
3.	Clarity of expression			✓						
4.	Level of preparation			✓						
5.	Level of interaction			✓						
6.	Accessibility outside the class			✓						
7.	Others (please specify)			✓						
A: Excellent		✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

**HEAD OF THE DEPARTMENT**

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Department Of Computer Science & Engg.,

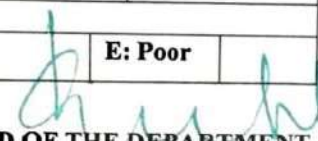
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Chennai - 600 073, INDIA

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Course Title		Recent Trends In Big Data Analytics								
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(f)	To Improve CGPA								Yes	
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1.	Pace of the Teaching/lecture		✓							
2.	Comment of the Subject		✓							
3.	Clarity of expression		✓							
4.	Level of preparation		✓							
5.	Level of interaction		✓							
6.	Accessibility outside the class		✓							
7.	Others (please specify)		✓							
A: Excellent		✓	B: Very Good			C: Good			D: Satisfactory	
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(b)	Get exposed to a relevant subject							Yes		
(c)	Curiosity							Yes		
(d)	Better Employment Opportunity							Yes		
(e)	Complete Course requirements							Yes		
(f)	To Improve CGPA							Yes		
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				B	C	D	E			
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# Bharath UNIVERSITY

பாரத பல்கலைக்கழகம்

**BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

**34**  
YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION



## MR. ASHISH AGARWAL

For actively participating in the value-added course "RECENT TRENDS IN  
BIG DATA ANALYTICS" Conducted by School of Computing, BIHER

from 6-04-2021 to 18.04-2021.

*S. S. S.*  
Course Coordinator

*[Signature]*  
Head of the Department

Director