



Indra Ganesan

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'B+' Grade, 2(f) & 12B Status Institution by UGC

IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION – 1

CURRICULAR ASPECTS

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

INDRA GANESAN COLLEGE OF ENGINEERING





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2020-2021 / EVEN SEMESTER

1.2 Academic Flexibility (30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	BIG DATA ANALYTICS				
Resource Person:	Mr.Vivek, Project Manager Axis V Creatives PVT LTD, Chennai.				
Date of conduct from:	14.06.2021	To:	18.06.2021	Duration:	30 Hours
Organized Department:	COMPUTER SCIENCE AND ENGINEERING				
Participant Year:	CSE IV,III,II, and M.E-I	Semester:	EVEN	No. of Students Registered:	82
Venue:	Online mode Google Meet: meet.google.com/ 14.06.2021 to 18.06.2021				

Table of Content

S. No	Document	Page No
1.	VAC Circular	3-3
2.	VAC Schedule	4-4
3.	List of the Students Participation	5-7
4.	Attendance Of Students	8-15
5.	VAC Test Paper	16-17
6.	VAC Answer Key	18-18
7.	VAC Test Answer Sheet- Sample	19-20
8.	VAC Mark Statement	21-27
9.	VAC Report	28-29
10.	Course Completion Certificates	30-34



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Status Institution by U.G.C.



Department of Computer Science & Engineering

Academic Year 2020-2021 – Even Semester

12.06.2021

DEPARTMENT CIRCULAR

Department of Computer Science & Engineering and IQAC of IGCE in association with **AXIS V CREATIVES PVT LTD**, is going to organize Value Added Course for UG II,III,IV and PG I year students on “**BIG DATA ANALYTICS**” from 14.06.2021 to 18.06.2021. Certificates will be issued to the eligible participants at the end of the Course. This training is to be provided in our campus.


Resource Person Detail	1.MR.VIVEK AXIS V CREATIVES PVT LTD CHENNAI
Venue	Google Meet: meet.google.com


HOD/CSE


PRINCIPAL

Cc:

- Principal Table
- IQAC Co-Ordinator
- Class In charges - II, III & IV and PG I Year
- II, III & IV-Year and PG I CSE Students
- Office File
- NoticeBoard


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(1) Status Institution by U.C.C.





Value Added Course


"Big Data Analytics"

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Introduction to Big Data	3	14.06.2021
2	Data Storage and Management	3	14.06.2021
3	Data Processing Frameworks	3	15.06.2021
4	Data Cleaning and Preprocessing	3	15.06.2021
5	Machine Learning for Big Data	3	16.06.2021
6	Data Visualization	3	16.06.2021
7	Big Data Analytics in Business	3	17.06.2021
8	Privacy and Ethical Considerations	3	17.06.2021
9	Real-Time Analytics	3	18.06.2021
10	Big Data Security	3	18.06.2021
11	Exam	1	18.06.2021
TOTAL HOURS(Excluding Exam)		30	


VAC Coordinator


HOD/CSE


Dr. G. Baiakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (644-458), Manikandam, Tiruchirappalli - 620 012

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Status Institution by UGC



Value Added Course

STUDENTS PARTICIPATION LIST

"Big Data Analytics"

S.NO.	REG.NO	STUDENT'S NAME	YEAR/ BRANCH
1	811217104001	AARTHI J	IV/CSE
2	811217104002	DEEPIKA N	IV/CSE
3	811217104003	DHANALAKSHMI R	IV/CSE
4	811217104004	GOADHAR FATHIMA S	IV/CSE
5	811217104005	GOWTHAM RAAJ K	IV/CSE
6	811217104007	JEYA PRATHA A	IV/CSE
7	811217104008	JICKSON S	IV/CSE
8	811217104009	KAMATCHI V	IV/CSE
9	811217104010	KOKILA V	IV/CSE
10	811217104011	LAKSHMI PRIYA M	IV/CSE
11	811217104012	NAVEEN R	IV/CSE
12	811217104013	PANNEER SELVAM R	IV/CSE
13	811217104014	PRINCY DEEPA X	IV/CSE
14	811217104015	RAGHUL L	IV/CSE
15	811217104016	SALMA BANU M	IV/CSE
16	811217104017	SEEBIKA M	IV/CSE
17	811217104019	SIVA SANKARI S	IV/CSE
18	811217104020	SWATHI M	IV/CSE
19	811217104022	VASUKI M	IV/CSE
20	811217104023	YOGESH KANNAN P H	IV/CSE
21	811218104001	AISHWARYA M	III/CSE
22	811218104002	AJITH KUMAR R	III/CSE
23	811218104003	ARAVINDH SAMY P	III/CSE
24	811218104004	ARJUN V	III/CSE
25	811218104005	DHARSHINI A	III/CSE
26	811218104006	DINESH KUMAR K	III/CSE
27	811218104007	GOWTHAM K	III/CSE
28	811218104008	HARIHARAN N	III/CSE
29	811218104009	HEMA LATHA B	III/CSE
30	811218104010	JEGATHISWARL D	III/CSE
31	811218104011	JOSHI DAYANA K	III/CSE
32	811218104012	KANAGARAJ K S	III/CSE
33	811218104013	KIRUTHIGA V	III/CSE


Dr. G. Baiakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(C) Status Institution by UGC.



S.NO.	REG.NO	STUDENT'S NAME	YEAR/ BRANCH
34	811218104014	MADHAVAN S	III/CSE
35	811218104015	MAHENDRAN S	III/CSE
36	811218104017	MUTHAIYA P	III/CSE
37	811218104018	NEETHIMOZHI A	III/CSE
38	811218104019	NITHYA P	III/CSE
39	811218104020	NIVEDHA S	III/CSE
40	811218104021	PRIYANGA.G	III/CSE
41	811218104022	RAMYA R	III/CSE
42	811218104023	SHARVESH CHARAN.S.A	III/CSE
43	811218104024	SATHASIVAM P	III/CSE
44	811218104026	SHALINI P	III/CSE
45	811218104027	SHANMUGANATHAN P	III/CSE
46	811218104028	SHEELA.S	III/CSE
47	811218104029	SUDHAKARAN C	III/CSE
48	811218104030	SUGASINI.G	III/CSE
49	811218104031	VAISHNAVI G	III/CSE
50	811218104032	VIGNA SRI S	III/CSE
51	811218104033	VIJAYA DHARANI K	III/CSE
52	811218104034	VINOTHINI S	III/CSE
53	811218104501	SIVASANGARI C	III/CSE
54	811219104001	ARUN R	II/CSE
55	811219104002	BALAMANIKANDAPRABHU B R	II/CSE
56	811219104003	BHARATHI S	II/CSE
57	811219104004	GOWTHAM C	II/CSE
58	811219104005	INDHUMATHI S	II/CSE
59	811219104006	ISHWARYA P	II/CSE
60	811219104007	KALAIYARASAN V	II/CSE
61	811219104008	KEERTHIKA K	II/CSE
62	811219104009	KEERTHIKA V	II/CSE
63	811219104010	KRISHI GOWTHAM R	II/CSE
64	811219104011	LOGADIPA SP	II/CSE
65	811219104012	MOHAMED NOWSATH M	II/CSE
66	811219104013	MOORTHI C	II/CSE
67	811219104014	NANCY C	II/CSE
68	811219104016	PRAVEEN K	II/CSE
69	811219104017	RANJANA S	II/CSE
70	811219104018	RAVINYA K	II/CSE

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.
NAAC Accredited, 2(C) Status Institution by UGC



S.NO.	REG.NO	STUDENT'S NAME	YEAR/ BRANCH
71	811219104020	SARANYA P	II/CSE
72	811219104021	SUVALAKSHMI P	II/CSE
73	811219104022	SWEATHA B	II/CSE
74	811219104023	VIGNESHWARAN V	II/CSE
75	811219104024	VIJAYALAKSHMI B	II/CSE
76	811219104025	VINCY SHARMILA K	II/CSE
77	811219104026	YATHESH M	II/CSE
78	811220405001	DEEPA LAKSHMI N	I/M.E(CSE)
79	811220405002	ISWARYA R	I/M.E(CSE)
80	811220405003	KARTHIGA M	I/M.E(CSE)
81	811220405004	KARTHIKA M	I/M.E(CSE)
82	811220405005	RAMALAKSHMI M	I/M.E(CSE)

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

VAC Coordinator

HoD/CSE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
AACSB Accredited, 2011 Status Institution by UGC



Department of Computer Science & Engineering

Academic Year 2020-2021 – Even Semester

STUDENTS PARTICIPATION LIST

VALUE ADDED COURSE

BIG DATA ANALYTICS

Dr. G. Balakrishnan, M.A., Ph.D.
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Tiruchirappalli

S.NO	REG NO	STUDENTS NAME	YEAR/ BRANCH	14.06.2021		15.06.2021		16.06.2021		17.06.2021		18.06.2021		NO OF SESSIONS ATTENDED	SIGN OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
1	811217104001	AARTHI J	IV/CSE	/	/	/	/	/	/	/	/	/	/		
2	811217104002	DEEPIKA N	IV/CSE	/	/	a	/	/	/	/	/	/	/	10	
3	811217104003	DHANALAKSHMI R	IV/CSE	/	/	/	/	/	/	/	/	/	/	9	
4	811217104004	GOADHAR FATHIMA S	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
5	811217104005	GOWTHAM RAAJ K	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
6	811217104007	JEYA PRATHA A	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
7	811217104008	JICKSON S	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
8	811217104009	KAMATCHI V	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
9	811217104010	KOKILA V	IV/CSE	/	/	/	/	a	/	/	/	/	/	9	
10	811217104011	LAKSHMI PRIYA M	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
11	811217104012	NAVEEN R	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
12	811217104013	PANNEER SELVAM R	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
13	811217104014	PRINCY DEEPA X	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
14	811217104015	RAGHUL L	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
15	811217104016	SALMA BANU M	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
16	811217104017	SEEBIKA M	IV/CSE	/	/	/	/	/	/	a	/	/	/	9	
17	811217104019	SIVA SANKARI S	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
				/	/	/	/	/	/	/	/	/	/	10	

Online Mode



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (M-45B), Manikandam, Trichirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2012 Status Institution by UGC




Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

S.NO	REG NO	STUDENTS NAME	YEAR/ BRANC H	14.06.2021		15.06.2021		16.06.2021		17.06.2021		18.06.2021		NO OF SESSIONS ATTENDED	SIGN OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
18	811217104020	SWATHI M	IV/CSE	/	/	/	/	/	/	/	/	/	/		
19	811217104022	VASUKI M	IV/CSE	/	/	/	/	/	/	/	/	/	/		
20	811217104023	YOGESH KANNAN P H	IV/CSE	/	/	/	/	/	/	/	/	/	/	10	
21	811218104001	AISHWARYA M	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
22	811218104002	AJITHI KUMAR R	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
23	811218104003	ARAVINDH SAMY P	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
24	811218104004	ARJUN V	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
25	811218104005	DHARSHINI A	III/CSE	/	/	a	/	/	/	/	/	/	/	9	
26	811218104006	DINESH KUMAR K	III/CSE	/	/	/	/	/	/	a	/	/	/	9	
27	811218104007	GOWTHAM K	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
28	811218104008	HARIHARAN N	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
29	811218104009	HIMA LATHA B	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
30	811218104010	JEGATHISWARLD	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
31	811218104011	JOSHI DAYANA K	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
32	811218104012	KANAGARAJ K S	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
33	811218104013	KIRUTHIGA V	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
34	811218104014	MADHAVAN S	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
35	811218104015	MAHENDRAN S	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
36	811218104017	MUTHAIYA P	III/CSE	/	/	/	/	/	a	/	/	/	/	9	
37	811218104018	NETHIMOZHI A	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
38	811218104019	NITHYA P	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
39	811218104020	NIVEDHA S	III/CSE	/	/	/	/	/	/	/	/	/	/	10	
40	811218104021	PRIYANGA.G	III/CSE	/	/	/	/	/	/	/	/	/	/	10	

Online Mode



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Status Institution by UGC



Name of the Student:

Year/Sem:

AU Register Number:

Value Added Course

“Big Data Analytics”

MCO QUESTIONS (25X4 = 100 Marks)

1. What is the term used for a collection of large, complex data sets that cannot be processed using traditional data processing tools?

- a) Big Data
- b) Small Data
- c) Medium Data
- d) Mini Data

2. Which of the following is not one of the four V's of Big Data?

- a) Velocity
- b) Volume
- c) Variety
- d) Value

3. What is the process of transforming structured and unstructured data into a format that can be easily analyzed?

- a) Data Mining
- b) Data Warehousing
- c) Data Integration
- d) Data Processing

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Trichirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2012 Status Institution by U.G.C.



4. Which of the following is a tool used for processing and analyzing Big Data?

- a) Hadoop
- b) MySQL
- c) PostgreSQL
- d) Oracle

5. What is the process of examining large and varied data sets to uncover hidden patterns, unknown correlations, market trends, customer preferences, and other useful information?


- a) Data Mining
- b) Data Warehousing
- c) Data Integration
- d) Data Processing

6. Which of the following is not a common challenge associated with Big Data?

- a) Data Quality
- b) Data Integration
- c) Data Privacy
- d) Data Duplication

7. Which of the following is a technique used to extract meaningful insights from data sets that are too large or complex to be processed by traditional data processing tools?

- a) Business Intelligence
- b) Machine Learning
- c) Artificial Intelligence
- d) Data Science


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



8. What is the process of storing and managing data in a way that allows for efficient retrieval and analysis?

- a) Data Warehousing
- b) Data Mining
- c) Data Integration
- d) Data Processing

9. Which of the following is a common programming language used for Big Data processing?


- a) C++
- b) Java
- c) Python
- d) All of the above

10. Which of the following is a popular NoSQL database used for Big Data processing?

- a) MySQL
- b) PostgreSQL
- c) Oracle
- d) MongoDB

11. What is the process of combining data from multiple sources into a single, unified view?

- a) Data Mining
- b) Data Warehousing


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



- c) Data Integration
- d) Data Processing

12. What is the term used for the ability of a system to handle increasing amounts of data and traffic without compromising performance?

- a) Scalability
- b) Reliability
- c) Availability
- d) Security

13. What is the process of cleaning and transforming data before it is used for analysis?

- a) Data Mining
- b) Data Warehousing
- c) Data Integration
- d) Data Preprocessing

14. Which of the following is not a common type of data in Big Data analysis?

- a) Structured Data
- b) Semi-Structured Data
- c) Unstructured Data
- d) Simple Data

15. Which of the following is a method for analyzing data in which the data is split into smaller subsets and processed in parallel across multiple servers or nodes?

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Tiruchy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2P2 Status Institution by U.G.C.



- a) Batch Processing
- b) Stream Processing
- c) MapReduce
- d) Hive

16. What is the process of analyzing data in real-time as it is generated?

- a) Batch Processing
- b) Stream Processing
- c) MapReduce
- d) Hive

17. Which of the following is a popular programming language used for data analysis and machine learning?

- a) C++
- b) Java
- c) Python
- d) All of the above

18. Which of the following is not a common data storage technology used for Big Data processing?

- a) Hadoop Distributed File System (HDFS)
- b) Cassandra
- c) MySQL
- d) Amazon S3

19. What is the process of automatically categorizing or grouping data based on its characteristics or attributes?

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



- a) Clustering
- b) Classification
- c) Regression
- d) Anomaly Detection

20. Which of the following is not a common data visualization tool used for Big Data analysis?

- a) Tableau
- b) QlikView
- c) Microsoft Excel
- d) D3.js

21. Which of the following is a popular open-source platform used for real-time data processing and analytics?

- a) Apache Kafka
- b) Apache Hadoop
- c) Apache Spark
- d) Apache Storm

22. Which of the following is a technique used for identifying patterns in data by training a model on a dataset and using it to make predictions on new data?

- a) Data Mining
- b) Machine Learning
- c) Natural Language Processing
- d) Text Analytics

23. Which of the following is not a common type of machine learning algorithm?



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Statutory Institution by U.G.C.



- a) Supervised Learning
- b) Unsupervised Learning
- c) Reinforcement Learning
- d) Decision Learning

24. Which of the following is a type of machine learning algorithm in which the input data is labeled and the model is trained to make predictions on new, unlabeled data?

- a) Supervised Learning
- b) Unsupervised Learning
- c) Reinforcement Learning
- d) All of the above

25. Which of the following is a type of machine learning algorithm in which the input data is not labeled and the model is trained to find patterns or structure in the data?

- a) Supervised Learning
- b) Unsupervised Learning
- c) Reinforcement Learning
- d) All of the above

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

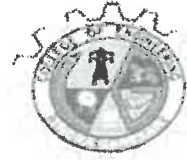


Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 3(B) Status Institution by UGC



ANSWER KEY

1	A	6	D	11	C	16	B	21	D
2	D	7	B	12	A	17	C	22	B
3	C	8	A	13	D	18	C	23	D
4	A	9	D	14	D	19	A	24	A
5	A	10	D	15	C	20	C	25	B

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

VAC COORDINATOR

Name: Hemalatha. B

Register Number:

811218104009

Big Data Analytics

1. a) Big Data ✓
2. d) Value ✓
3. c) Data Integration ✓
4. a) Hadoop ✓
5. b) Data warehouse ✓
6. d) Data Duplication ✓
7. B) Machine Learning ✓
8. A) Data warehouse ✓
9. d) All of the above ✓
10. d) MongoDB ✓
11. c) Data Integration ✓
12. A) Scalability ✓
13. D) data processing ✓
14. D) Simple Data ✓
15. c) Map Reduce. ✓

22
25



Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Name: Growtham.c

Register Number:

811219104004

Big Data Analytics

- 1 A Big data ✓
- 2 D. Value ✓
- 3 C Data integration ✓
- 4 A Hadoop ✓
- 5 A Data Mining ✓
- 6 D Data Duplication ✓
- 7 B Machine Learning ✓
- 8 D Data processing ✗
- 9 D All of the above ✓
- 10 D Mango DB ✓
- 11 C Data Integration ✗
- 12 A Scalability ✓
- 13 C Data Integration ✗
- 14 D Simple data ✓
- 15 C Map Reduce ✓
- 16 B Stream processing ✓
- 17 C Python ✓

21
25



Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Trichirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
AACSB Accredited, 2015 Status Institution by UGC



Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

STUDENTS MARK SHEET LIST

VALUE ADDED COURSE

BIG DATA ANALYTICS

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Percentage (100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
1	811217104001	AARTHI J	IV/CSE	30	100	20	80	90
2	811217104002	DEEPIKA N	IV/CSE	30	83	15	60	72
3	811217104003	DHANALAKSHMI R	IV/CSE	30	100	19	76	88
4	811217104004	GOADHAR FATHIMA S	IV/CSE	30	100	22	88	94
5	811217104005	GOWTHAM RAAJ K	IV/CSE	29	92	18	72	82
6	811217104007	JEYA PRATHA A	IV/CSE	28	92	17	68	80
7	811217104008	JICKSON S	IV/CSE	28	100	18	72	86
8	811217104009	KAMATCHI V	IV/CSE	29	83	17	68	76
9	811217104010	KOKILA V	IV/CSE	29	92	16	64	78
10	811217104011	LAKSHMI PRIYA M	IV/CSE	30	92	16	64	78
11	811217104012	NAVEEN R	IV/CSE	30	100	20	80	90
12	811217104013	PANNEER SELVAM R	IV/CSE	30	92	20	80	86
13	811217104014	PRINCY DEEPA X	IV/CSE	28	100	22	88	94
14	811217104015	RAGHUL L	IV/CSE	29	92	17	68	80
15	811217104016	SALMA BANU M	IV/CSE	29	83	16	64	74
16	811217104017	SEEBIKA M	IV/CSE	30	83	16	64	74



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2nd Status Institution by UGC



Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Percentage (100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
17	811217104019	SIVA SANKARI S	IV/CSE	30	100	22	88	94
18	811217104020	SWATHI M	IV/CSE	30	92	18	72	82
19	811217104022	VASUKI M	IV/CSE	30	100	22	88	94
20	811217104023	YOGESH KANNAN P H	IV/CSE	28	100	22	88	94
21	811218104001	AISHWARYA M	III/CSE	28	92	20	80	86
22	811218104002	AJITH KUMAR R	III/CSE	28	92	19	76	84
23	811218104003	ARAVINDH SAMY P	III/CSE	29	100	20	80	90
24	811218104004	ARJUN V	III/CSE	29	83	16	64	74
25	811218104005	DHARSHINI A	III/CSE	29	83	16	64	74
26	811218104006	DINESH KUMAR K	III/CSE	30	100	22	88	94
27	811218104007	GOWTHAM K	III/CSE	30	92	18	72	82
28	811218104008	HARIHARAN N	III/CSE	30	100	22	88	94
29	811218104009	HEMA LATHA B	III/CSE	30	100	22	88	94
30	811218104010	JEGATHISWARI D	III/CSE	29	100	22	88	94
31	811218104011	JOSHI DAYANA K	III/CSE	29	92	17	68	80
32	811218104012	KANAGARAJ K S	III/CSE	29	92	19	76	84
33	811218104013	KIRUTHIGA V	III/CSE	30	92	19	76	84
34	811218104014	MADHAVAN S	III/CSE	30	100	20	80	90
35	811218104015	MAHENDRAN S	III/CSE	30	83	16	64	74
36	811218104017	MUTHAIYA P	III/CSE	28	83	16	64	74
37	811218104018	NEETHIMOZHI A	III/CSE	28	100	22	88	94
38	811218104019	NITHYA P	III/CSE	28	92	18	72	82
39	811218104020	NIVEDHA S	III/CSE	30	100	22	88	94



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Status Institution by UGC



Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A 50% of B)
				No. of Session Attended	Attendance Percentage (100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
40	811218104021	PRIYANGA.G	III/CSE	30	100	20	80	90
41	811218104022	RAMYA R	III/CSE	30	83	16	64	74
42	811218104023	SHARVESH CHARAN.S.A	III/CSE	29	92	19	76	84
43	811218104024	SATHASIVAM P	III/CSE	29	92	19	76	84
44	811218104026	SHALINI P	III/CSE	29	100	20	80	90
45	811218104027	SHANMUGANATHAN P	III/CSE	29	83	16	64	74
46	811218104028	SHEELA.S	III/CSE	29	83	16	64	74
47	811218104029	SUDHAKARAN C	III/CSE	29	100	22	88	94
48	811218104030	SUGASINI.G	III/CSE	30	92	18	72	82
49	811218104031	VAISHNAVI G	III/CSE	30	92	19	76	84
50	811218104032	VIGNA SRI S	III/CSE	30	92	19	76	84
51	811218104033	VIJAYA DHARANI K	III/CSE	30	100	20	80	90
52	811218104034	VINOTHINI S	III/CSE	30	100	20	80	90
53	811218104501	SIVASANGARI C	III/CSE	30	83	16	64	74
54	811219104001	ARUN R	II/CSE	30	83	16	64	74
55	811219104002	BALAMANIKANDAPRABHU B R	II/CSE	30	100	22	88	94
56	811219104003	BHARATHI S	II/CSE	30	92	18	72	82
57	811219104004	GOWTHAM C	II/CSE	30	100	22	88	94
58	811219104005	INDHUMATHI S	II/CSE	30	100	22	88	94
59	811219104006	ISHWARYA P	II/CSE	30	100	22	88	94
60	811219104007	KALAIYARASAN V	II/CSE	29	100	20	80	90
61	811219104008	KEERTHIKA K	II/CSE	29	83	16	64	74
62	811219104009	KEERTHIKA V	II/CSE	28	83	16	64	74



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AIU, TE, New Delhi & Affiliated to Anna University, Chennai
AACSB Accredited, 21st Status Institution by IETE



Dr. G. Balakrishnan M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A 50% of B)
				No. of Session Attended	Attendance Percentage (100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
63	811219104010	KRISHI GOWTHAM R	II/CSE	28	100	22	88	74
64	811219104011	LOGADIPA SP	II/CSE	29	100	20	80	74
65	811219104012	MOHAMED NOWSATH M	II/CSE	29	83	16	64	94
66	811219104013	MOORTHY C	II/CSE	29	100	22	88	90
67	811219104014	NANCY C	II/CSE	29	92	18	72	74
68	811219104016	PRAVEEN K	II/CSE	30	100	22	88	94
69	811219104017	RANJANA S	II/CSE	30	83	16	64	82
70	811219104018	RAVINYA K	II/CSE	30	100	22	88	94
71	811219104020	SARANYA P	II/CSE	30	92	18	72	74
72	811219104021	SUVALAKSHMI P	II/CSE	30	100	22	64	94
73	811219104022	SWEATHA B	II/CSE	30	92	18	64	82
74	811219104023	VIGNESHWARAN V	II/CSE	30	100	22	88	82
75	811219104024	VIJAYALAKSHMI B	II/CSE	30	100	22	72	78
76	811219104025	VINCY SHARMILA K	II/CSE	30	92	22	88	94
77	811219104026	YATHESH M	II/CSE	29	100	20	88	86
78	811220405001	DEEPA LAKSHMI N	I/M.E(CSE)	29	100	16	88	90
79	811220405002	ISWARYA R	I/M.E(CSE)	29	83	16	80	94
80	811220405003	KARTHIGA M	I/M.E(CSE)	30	100	22	64	94
81	811220405004	KARTHIKA M	I/M.E(CSE)	30	92	20	64	82
82	811220405005	RAMALAKSHMI M	I/M.E(CSE)	30	100	16	88	82

A. Suresh
VAC Coordinator

D. Reddy
HoD/CSE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012

Approved by: AICTE, New Delhi & Affiliated to Anna University, Chennai

NAAC Accredited, 2023 Status Institution by U.G.C.



Report On Value Added Course

Title	BIG DATA ANALYTICS				
Resource Person:	Mr.Vivek, Project Manager AXIS V CREATIVES PVT LTD , CHENNAI				
Date of conduct from :	14.06.2021	To:	18.06.2021	Duration:	30 Hours
Organized Department	COMPUTER SCIENCE AND ENGINEERING				
Participant	CSE IV,III ,II and PG I Year	No. of Students Registered	82		
Venue:	online mode Google Meet: meet.google.com/14.06.2021to 18.06.2021				


Outcome of Value Added Course (VAC): At the end of the Course, Students can able to

- Know the fundamentals of MACHINE learning and its architecture.
- Discuss Module, controllers, Events
- Apply inbuilt and custom pipes
- Develop object-oriented Ruby programs using classes and objects
- Design forms and Modules in Machine Learning
- Explain Services, Animations, Routing.

Assessment Process

- Students, who are securing more than 60% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted
- Total Score = $(0.5 * \text{Attendance in VAC out of 100 percentage} + 0.5 * \text{Test mark in VAC out of 100 marks})$


VAC Coordinator


HoD/CSE


Principal


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012

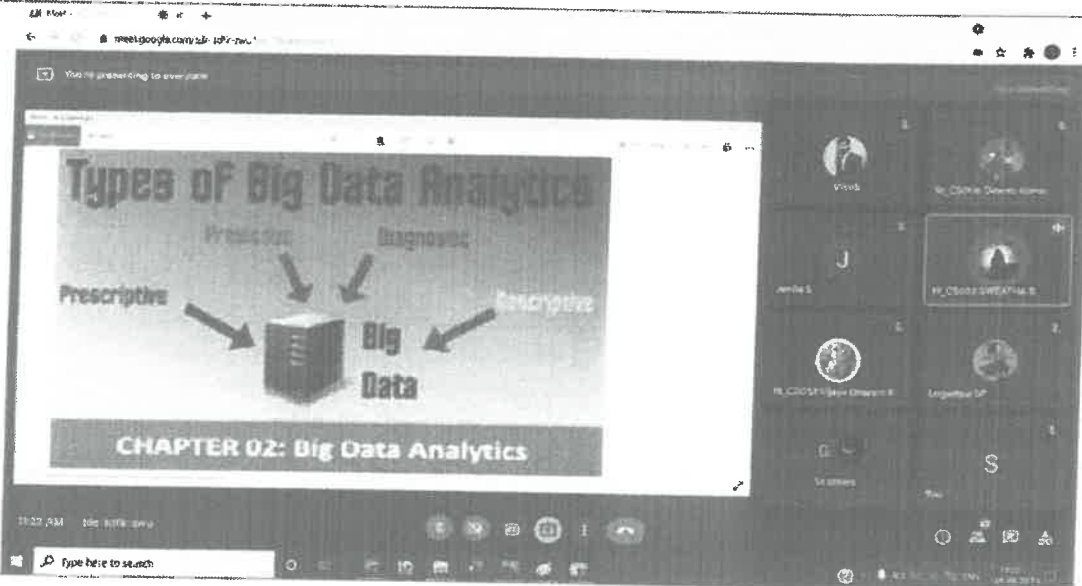
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2B3 Status Institution by UGC



Report On Value Added Course

Title	BIG DATA ANALYTICS		
Resource Person:	Mr.Vivek, Project Manager AXIS V CREATIVES PVT LTD , CHENNAI		
Date of conduct from :	14.06.2021	To:	18.06.2021
		Duration:	30 Hours
Organized Department	COMPUTER SCIENCE AND ENGINEERING		
Participant	CSE IV,III ,II and PG I Year	No. of Students Registered	82
Venue:	online mode Google Meet: meet.google.com/14.06.2021to18.06.2021		

Sample Photo



A. Shreejith
VAC Coordinator

D. Vaidya
HoD/CSE

[Signature]
Principal

[Signature]

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



Indra Ganesan
COLLEGE OF ENGINEERING
Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 3rd Status Institution by U.G.C.



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **KRISHI GOWTHAM.R** of
..... **II.YEAR.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan
COLLEGE OF ENGINEERING
 Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
 Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
 NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**INDHUMATHI S**..... of
**II.YEAR.CSE**..... has successfully completed the Value Added Course on **BIG
 DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
 our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
 18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
 Principal
 Indra Ganesan College of Engineering
 IG Valley, Madurai Main Road
 Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-458), Manikandam, Tiruchireppalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **PRAVEEN K** of
..... **II.YEAR.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan
COLLEGE OF ENGINEERING
Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 201 Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**KALAIYARASAN V**..... of
.....**II.YEAR.CSE**..... has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan
COLLEGE OF ENGINEERING
Madurai Main Road (NH-456), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(1) Status Institution by U.G.C.



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **MOHAMED NOWSATH M**..... of
.....**II.YEAR.CSE**..... has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-456), Manikandam, Tiruchirappalli - 620 012

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **BHARATHI S** of
..... **II.YEAR.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012

Principal
IGCE



Indra Ganesan
COLLEGE OF ENGINEERING
 Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
 Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
 NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**SHEELA S**..... of
**III YEAR CSE**..... has successfully completed the Value Added Course on **BIG
 DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
 our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
 18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal,
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Trichirappalli - 620 012

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2B7 Status Institution by U.G.C



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **NEETHIMOZHI A** of
..... **III YEAR CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Medurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(1) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**SHANMUGANATHAN P**..... of
.....**III YEAR CSE**..... has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(1) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**VIGNA SRI S**..... of
.....**III YEAR CSE**..... has successfully completed the Value Added Course on **BIG DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO 18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-456), Manikandam, Truchirappalli - 620 012

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2017 Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**AJITHKUMAR R**..... of
.....**III YEAR CSE**..... has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**AISHWARYA M**..... of
.....**III YEAR CSE**..... has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **RAGUL L** of
..... **IV.YEAR.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2013 Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**KAMATCHI V**..... of
.....**IV.YEAR.CSE**..... has successfully completed the Value Added Course on **BIG DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO 18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Annam University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **JEYA PRATHA A** of
..... **IV.YEAR.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.A., M.Sc., M.Phil., M.Tech., M.B.A., M.Ed.
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchiroppalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**DEEPIKA N**..... of
.....**IV.YEAR.CSE**..... has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan
COLLEGE OF ENGINEERING
Madurai Main Road (NH-45B), Manikandam, Trichirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited (B) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **GOWTHAM RAAJ K** of
..... **IV.YEAR.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE



Indra Ganesan
COLLEGE OF ENGINEERING
 Madurai Main Road (NH-45B), Manikandam, Tiruchireppalli - 620 012
 Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
 NAAC Accredited, 2(B) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms.**AARTHI J**..... of
**IV.YEAR.CSE**..... has successfully completed the Value Added Course on **BIG
 DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
 our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
 18th Dec 2021 during the Academic Year 2020-2021.

Dr. G. Balakrishnan, M.E., Ph.D.,
 Principal
 Indra Ganesan College of Engineering
 IG Valley, Madurai Main Road
 Manikandam, Trichy-620 012.

Principal
IGCE

Mr. C. Vivek,
 Project Manager,
AXIS V Creatives Pvt, Ltd



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms. **ISWARYA R.** of
..... **I.YEAR.M.E.CSE** has successfully completed the Value Added Course on **BIG
DATA ANALYTICS** organized by Department of Computer Science and Engineering and IQAC of
our Institution in Association with **AXIS V CREATIVES PVT LTD** from 14th Dec 2021 TO
18th Dec 2021 during the Academic Year 2020-2021.

Mr. C. Vivek,
Project Manager,
AXIS V Creatives Pvt, Ltd

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal
IGCE