



**Department of Data Science**  
**St. Joseph's College (Autonomous)**  
Accredited at A++ Grade (4<sup>th</sup> Cycle) by NAAC,  
Special Heritage Status awarded by UGC  
**Tiruchirappalli – 620 002, India.**



# **DATASCIENCE ASSOCIATION**

## **Department of Data Science**

### **ST.JOSEPH'S COLLEGE (AUTONOMOUS)**

ACCREDITED AT A++ BY NAAC (CYCLE IV)

COLLEGE WITH SPECIAL HERITAGE STATUS

COLLEGE WITH POTENTIAL FOR EXCELLENCE

TRICHY, TAMIL NADU

# **VALUE ADDED COURSE ON " DATA VISUALIZATION"**

## **PROGRAMME COORDINATOR**

**Dr. A. Beatrice Dorothy**

**Dr. I. Priya Stella Mary**

**Assistant Professor**

**Department of Data Science**

**St. Joseph's College (Autonomous)**

**Trichy**



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**Report on” Value-Added Courses for the academic year 2022-2023”**

<b>DATE FROM:</b>	12/12/2022	<b>To:</b>	31/03/2023		
<b>Name of the Course and Coordinator</b>	Data Visualization		Dr. A. Beatrice Dorothy Dr. I. Priya Stella Mary		
<b>No. of Students Enrolled</b>	59				
<b>Mode (Online/Offline / Blended)</b>	Offline				
<b>Course Code</b>	21PDS2VAC4	<b>Duration of the Course (in hrs)</b>	60	<b>No. of Times offered during the Same Year</b>	1



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### **Report on Value Added Programme**

#### **Data Visualization**

**Course Code:** 21PDS2VAC4

**Academic Year:** 2022-2023

**Course in-charge** Dr. A. Beatrice Dorothy  
Dr. I. Priya Stella Mary

**Semester:** II

#### **Objective:**

- To enable students to Perform Data manipulation using Power BI and Tableau.

#### **Report:**

- The Department of Data Science for the academic year (2022–2023) organized a “Value-Added Programme” Data Visualization” for the I PG students.
- The course started by 12<sup>th</sup> December 2022 and ended on 31<sup>st</sup> March 2023. Total of 59 students enrolled and completed the “Data Visualization” Course handled by : Dr. A. Beatrice Dorothy and Dr. I. Priya Stella Mary, Assistant Professor, Department of Data Science, St. Joseph's College (Autonomous), Tiruchirappalli
- The flow of the course mainly concentrates on amplifying the abilities of the students in concern with data visualization using power BI and Tableau.

Signature of the Head

**HOD**  
Department of Data Science  
St. Joseph's College (Autonomous),  
Trichy - 620 002.



**Semester II**  
**21PDS2VAC4**

**Hours/Week: 4**

## **Data Visualization**

### **Course Outcomes**

On successful completion of this course, the students will be able to

1. Recall the basic concepts of Data Connectivity.
3. Examine the features of Power BI and Tableau.
3. Perform Data manipulation using Power BI and Tableau.
4. Interpret the Mappings and Workflows of Power BI and Tableau.
5. Evaluate the performance of the model.
6. Visualize the data to get the meaningful insights.

### **Unit – I**

**(12 hrs)**

**Introduction to Power BI** - Features of Power BI - Building Blocks of Power BI - Power BI Tools - Installing the Power BI Desktop App - Connecting to Data Sources - Getting Data from Excel Files - Using Power BI Desktop - Installing the Power BI Gateway.

### **Unit – II**

**(12 hrs)**

**Getting Online Data** - Getting Data from Facebook - Getting Data from other Web Sources - Getting Data from Twitter - Creating Datasets - Creating a Dataset from a Single Data source - Creating a Dataset from a Multiple Data Sources - Refreshing Data in a Dataset - Creating Visualizations from Datasets - Creating Reports - Creating Dashboards.

### **Unit – III**

**(12 hrs)**

**Introduction to Tableau Desktop** - Analyzing Data - Connecting to your data in Tableau - Understanding Tableau worksheets - Starting to analyze data - Enhancing the analysis - Creating Dashboards - Understanding the Basics - Working with Dimensions and Measures

### **Unit – IV**

**(12 hrs)**

**Visualizing Data** - Using the Shelves and Cards - The Columns shelf - The Rows shelf - Using a quick filter to exclude data - The Filters shelf - Pages shelf - Marks card - Modifying the View - Fitting the space - Adding annotations - Adding mark labels - Understanding the Tableau Desktop Environment.

### **Unit – V**

**(12 hrs)**

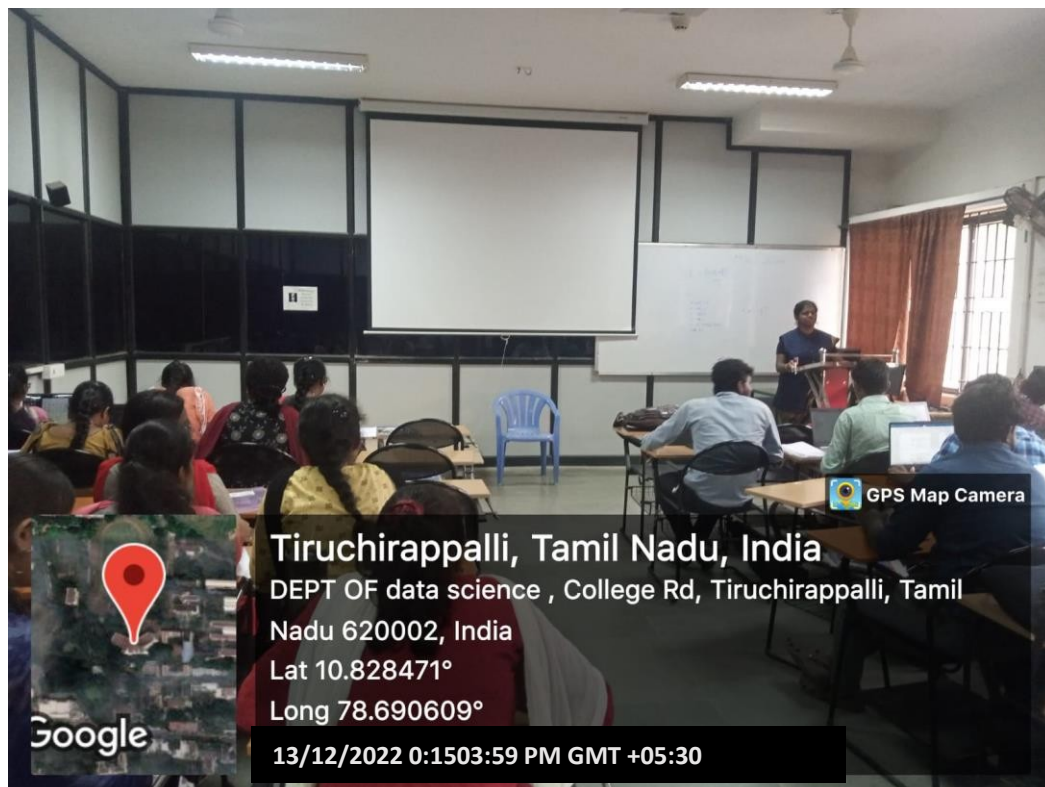
**Understanding the Chart Options** - Viewing Your Data - Adding Worksheets - Creating Dashboards



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**PHOTOGRAPHS**











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## **CERTIFICATES:**



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Tiruchirappalli - 620002,  
Tamil Nadu, India.




### **CERTIFICATION OF PARTICIPATION**


**THIS IS TO CERTIFY THAT**

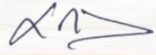
**CHARULATHA D**

Participated in the value added course " **Data Visualization** " during the period from 12/12/2022 to 31/03/2023 conducted by the Department of Data Science, St. Joseph's College (Autonomous), Tiruchirappalli – 620002.





DR. A. BEATRICE DOROTHY  
Programme Coordinator







DR. L. AROCKIAM  
Head of the Department



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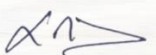
**MADHAVAN S A**

Participated in the value added course " **Data Visualization** " during the period from 12/12/2022 to 31/03/2023 conducted by the Department of Data Science, St. Joseph's College (Autonomous), Tiruchirappalli – 620002.



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**ATTENDANCE SHEET**

**I M. Sc. Data Science (2022-24) Batch**

S.NO	D. NO.	NAME	SIGNATURE
1	22PDS801	DEEPAN P	
2	22PDS802	CHARULATHA D	
3	22PDS803	NISHIN JERRY X I	
4	22PDS804	NIRMAL JOEL X I	
5	22PDS805	HARIVIGNESH S	
6	22PDS806	MADHAVAN S A	
7	22PDS807	HATLIN JOHEIT J A	
8	22PDS808	EDWIN PRAKASH J	
9	22PDS809	SUJITH NAMASIVAYAM P	
10	22PDS810	AARTHI S	
11	22PDS811	KANIMOZHI A	
12	22PDS812	NIXON L	





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13	22PDS813	LEANDER PIOUS X	<i>Leander Pious X</i>
14	22PDS814	JESTIN.S	<i>J. Justin S.</i>
15	22PDS815	BIHUVANA N	<i>Bihuvana N</i>
16	22PDS816	ARUN PRASATH	<i>Arun Prasath</i>
17	22PDS817	SARA ROVENA S	<i>S. Sara Rovena S.</i>
18	22PDS818	AGNES SALOMI TANIA P	<i>Agnes Salomi Tania P</i>
19	22PDS819	DIVINE REGAN A	<i>D. Divine Regan A</i>
20	22PDS820	ANCELIN GENO A	<i>Ancelin Geno A</i>
21	22PDS821	MICHEAL ANTONY A	<i>A. Michael Antony</i>
22	22PDS822	CINCIYA THOMAS MELATHIL	<i>C. Cinciya Thomas Melathil</i>
23	22PDS824	JACKSHINI S	<i>Jackshini S.</i>
24	22PDS825	JOE AROWIN A	<i>J. Arowin A</i>
25	22PDS826	DEVADHARSHINI R	<i>Devadharshini R</i>
26	22PDS827	DOUGLAS JAMES P	<i>Douglas James P</i>
27	22PDS828	MARTIN PRABHU S	<i>M. Prabhu S</i>
28	22PDS829	MERWIN RAGUL I	<i>M. Ragul I</i>
29	22PDS830	JANANIMEENA R	<i>J. Jananimeena R</i>
30	22PDS831	SHIVASHANKARI E	<i>Shivashankari E</i>
31	22PDS832	JASMINE A B	<i>Jasmine A B</i>
32	22PDS833	SIVAPRIYA K	<i>Sivapriya K</i>
33	22PDS834	JOSEPH T J	<i>Joseph T J</i>
34	22PDS835	INFANT JEYABAL A	<i>A. Infant Jeyabal A</i>
35	22PDS837	DHANASEKAR D	<i>Dhanasekar D</i>
36	22PDS838	STEPHEN RAJ S	<i>S. Stephen Raj S</i>
37	22PDS839	M.LEENA	<i>M. Leena</i>
38	22PDS840	ANUBHARATHI P	<i>P. Anubharathi</i>
39	22PDS841	ESTHER JENIFER P	<i>P. Esther Jenifer</i>
40	22PDS842	SUMAIYA SULTAN	<i>S. Sumaiya Sultan</i>
41	22PDS843	ESWAR E	<i>E. Eswar</i>
42	22PDS844	MUGISHA CIELLA DANILLA	<i>M. Mugisha Ciella Danilla</i>





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43	22PDS845	NANDINI K	K. R. Revathi
44	22PDS846	PRASANTH R	R. R. R.
45	22PDS847	UDHAYA P	P. Udhaya
46	22PDS849	PADMAVATHI S	S. Padma
47	22PDS850	NIRANJANA	A. R. K.
48	22PDS851	AHAASRAJ RR	A. R. R.
49	22PDS852	GOBINATH T	T. G. G.
50	22PDS853	KULARANJITH K	K. K. K.
51	22PDS854	RAMANAN P	P. Raman
52	22PDS857	PRAVEEN KUMAR P	P. Praveen
53	22PDS858	PILAVENDRAN A	A. P. P.
54	22PDS859	AMALORPAVA BELCIYA S	S. A. A.
55	22PDS860	JOE NICKSON V	V. N. V.
56	22PDS862	LILLY J S	S. J. S.
57	22PDS863	INFANT JEGAN FERNANDO H	H. J. F.
58	22PDS864	HARIHARAN R	R. H. R.
59	22PDS865	RITHICK T	T. R. T.



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