

**M.M. Institute of Computer Technology & Business Management**  
**Maharishi Markandeshwar (Deemed To Be University)**  
**Mullana-Ambala, Haryana (INDIA) - 133207**  
(Established under Section 3 of the UGC Act, 1956)  
(Accredited by NAAC with Grade 'A++')

### **VA-MCA-08: Data Visualization Using Power BI**

**Course Objectives:** This course aims to introduce students to the principles of Business Intelligence (BI) and its role in data-driven decision-making. Students will learn to use tools like Power BI to connect, transform, and visualize data effectively. The course focuses on developing skills to create interactive dashboards and perform advanced data analysis for real-world applications.

- Gain foundational knowledge of business intelligence concepts and Power BI architecture.
- Learn to efficiently connect, transform, and model data using Power BI tools such as Power Query Editor and data modeling techniques.
- Develop the ability to design and customize dynamic reports and interactive dashboards in Power BI using various visualization techniques and AI-enabled features.

<b>Session No.</b>	<b>Contents to be covered</b>
1	Overview of Business Intelligence
2	Introduction to Power BI
3	Power BI Architecture
4	Connections in Power BI (Import/Direct)
5	Power Query Editor
6	Combining Data – Merging and Appending
7	Modeling Data & Relationships
8	Types of Visuals, Formatting, and Properties
9	AI-Based Visuals (Smart Narratives, Q&A visuals, etc.)
10	Filter Pane and Slicers
11	Drill-Through and Drill-Down
12	Bookmarks & Tooltips
13	Data Analysis Expressions (DAX)
14	Calculated Columns vs. Measures
15	RLS (Row Level Security)
16	Mini Project

**Course Outcomes: By the completion of the course, the students will be able to:**

- Design and implement interactive dashboards and reports using Power BI.
- Transform raw data into actionable insights through effective data modeling and analysis.
- Apply DAX expressions and advanced visualization features to solve real-world business problems.

**Suggested Books:**

- Marco Russo , " Introducing Microsoft Power BI" , Microsoft Press.
- Marco Russo , " The Definitive Guide to DAX" , Microsoft Press.
- Jack A. Hyman , "Microsoft Power BI For Dummies" , John Wiley & Sons, Inc.



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No: MMICTBM/2026/17

Dated: 13.01.2026

**Value Added Course on Data Visualization Using Power BI**

**M.M Institute of Computer Technology & Business Management** is pleased to inform you about starting of "Value Added Course" tailored to equip participants with valuable knowledge **w.e.f. 17<sup>th</sup> January 2026** as per the details given below:

Course Name & Code	Data Visualization Using Power BI (VA-MCA-08)
Last date for registration	16.01.2026
Duration	16 hours
Mode of Classes	Offline
Venue of Classes	MMICTBM Building
Date of Start	17.01.2026

**The syllabus of the course is enclosed for your ready reference.**

Participants are instructed to maintain:

- Regular attendance and be punctual.
- Actively participate in class discussions, group activities, and Q&A sessions.
- Collaborate with your fellow students on group projects and Assignments.

All of you are requested to please circulate this information among students of your respective Department/College/Institute and also encourage them to register by 16<sup>th</sup> January 2026.

**Registration Link:** <https://forms.gle/tpNgREWrlH2rYXRrG9>

Certificates will be provided based on attendance and continuous evaluation.

To know more about the Course, you may contact **Mr. Varun Gupta / Ms. Chetna Thakur** at 9811932776 / 8219837467.

**Copy to:**

1. All Directors/Principals/Heads
2. Dean Academic, MM(DU)
3. Dr. Diwakar Aggarwal, Criteria-1 Incharge, MM(DU)
4. All Staff members, MMICTBM
5. All Students, MMICTBM

  
Principal  
13.01.2026