MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

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A Report on one-day Hands-on Training Program on "POWER BI"

Organized by Department of Electrical and Electronics Engineering In association with MITS - IE (I) Students' Chapter on 03.11.2025



Report Submitted by: Mr. Ramesh Kumar R, Assistant Professor, Department of Electrical & Electronics Engineering and Dr. V B Thurai Raaj, Assistant Professor, Department of Electrical & Electronics Engineering, SPOC - APSSDC.

Resource Person Details: Mr. Kumar Mayank Priyadarshi, Aylin Technologies Private Limited, Delhi.

Venue: Seminar Hall-C

Total Participants: 141 Students Mode of Conduct: Offline Report Received on 11.11,2025.

The MITS-IE(I) Students Chapter, Madanapalle Institute of Technology and Science, Andhra Pradesh, Madanapalle, in association with the Department of Electrical and Electronics Engineering, MITS, Madanapalle, organized a One-day Hands-On training program on "POWER BI" on 03.11.2025. About 141 students participated in this program, making the event a success.

A summary of the skill development program is as follows:

Dr. Dipankar Roy, Dean, School of Engineering, and Dr. A. V. Pavan Kumar, Professor and Head of the Department of EEE, graced the inaugural function.

The event commenced with a welcome address by Mr. Ramesh Kumar R., Assistant Professor, Department of EEE. Dr. V. B. Thurai Raaj introduced the resource person, following which Dr. A. V. Pavan Kumar extended a warm welcome to the guest and highlighted the significance of the training program. He also gave a brief overview of the one-day technical workshop.



Dr. Dipankar Roy officially inaugurated the program with an inspiring address, emphasizing the importance of such training initiatives for enhancing students' placement opportunities and career development.

The 141 students from the third year and the second year from the Department of EEE have participated in this one-day Hands-on training program.

Training Sessions Overview:

A one-day offline Hands-on Training Program on Power BI was held on 03/11/2025 at the Seminar Hall - C. The purpose of the workshop was to provide participants with a thorough understanding of the basic concepts and practical experience related to POWER BI software. The event was divided into two sessions—morning and evening—catering to students from electrical engineering, all of whom had a strong interest in intuitive data visualization, detailed analytics, and creating interactive dashboards for real-time use.



Morning Schedule: 9:10 AM – 12:10 PM
Afternoon Schedule: 1:00 PM – 4:30 PM

Morning Session: Introduction to Power BI

The morning session began with a detailed introduction to Power BI, emphasizing its capabilities and flexibility as a top business intelligence and data visualization platform. The instructor explained how Power BI transforms raw data into valuable insights through interactive dashboards and reports, while seamlessly connecting to various data sources, including Excel, SQL Server, Azure, and other cloud services. Participants learned about the main components — Power Query, Power Pivot, and Power View — which work together to support data extraction, transformation, modelling, and visualization within a single environment.

The session also covered data preparation, modelling, and visualization, focusing on best practices for cleaning and shaping datasets with Power Query, and creating relationships, hierarchies, and measures through the Power BI data model. Participants gained practical experience in creating visual elements, such as bar charts, line graphs, slicers, and KPI cards, and learned to utilize DAX formulas for complex calculations. By the end of the session, they developed a strong understanding of the Power BI Desktop environment, laying the foundation for advanced topics such as dashboard design and publishing in the Power BI Service.

Afternoon Session: Hands-On Training and Practical Implementation

The afternoon session centred on hands-on training, where participants individually engaged in practical Power BI exercises. The session started with data import and transformation using Power Query, focusing on techniques for cleaning, merging, and shaping data for analysis. Participants then proceeded to data modelling and visualization, creating relationships, calculating measures with DAX, and creating interactive dashboards that displayed sales performance across regions and categories.

The instructor guided participants through troubleshooting common issues, optimizing visuals, and applying best practices in dashboard design. The session ended with publishing reports to the Power BI Service, exploring data refresh options, and sharing capabilities. By the end, participants had built complete, interactive dashboards from raw data, gaining hands-on confidence in using Power BI for real-world analytics.

The valedictory session of the one-day Power BI workshop was attended by Dr. A. V. Pavan Kumar, Head of the Department of Electrical and Electronics Engineering (HOD/EEE), who delivered the closing remarks and emphasized the growing importance of Power BI in data-driven decision-making and professional development. He highlighted how proficiency in analytics tools like Power BI can significantly enhance students' technical and analytical abilities, preparing them for industry-ready roles.

Dr. V. B. Thurai Raaj, Assistant Professor of Electrical and Electronic Engineering, also addressed the audience and shared his insights on the growing importance of business intelligence and data visualization skills in shaping successful engineering careers.

As a token of appreciation, the resource person was presented with a shawl and a memento in acknowledgment of his valuable contribution to the workshop. The session ended with expressions of gratitude and appreciation, signifying the successful conclusion of an engaging and insightful day of learning.

Overall Outcomes: -

- 1. Participants gained a foundational understanding of business intelligence concepts and the role of Power BI in transforming raw data into meaningful insights for decision-making.
- 2. They acquired hands-on experience in using Power BI Desktop, learning data import, cleaning, and transformation techniques through Power Query to prepare structured datasets for analysis.
- 3. The workshop provided practical exposure to data modeling and DAX (Data Analysis Expressions), enabling participants to create calculated measures, establish relationships, and design interactive dashboards.
- 4. Participants improved their data visualization and analytical skills, gaining confidence in creating reports with slicers, filters, and KPI indicators to effectively communicate business performance.
- 5. By the end of the workshop, participants were motivated to explore advanced Power BI features such as AI visuals, cloud integration, and enterprise report publishing, recognizing the tool's growing importance in analytics and data-driven industries.

As event coordinators, we extend our gratitude to the **Management** and Vice Chancellor, **Dr. C. Yuvaraj**, of MITS Deemed to be University, for their ongoing support. We thank **Dr. P. Ramanathan**, Principal, for granting permission and providing financial support to organize this program. We appreciate **Dr. C. Kamal Basha**, Professor and Vice Principal of Administration, for providing the necessary support promptly. Professor and Dean of the School of Engineering, **Dr. Dipankar Roy**, for his ongoing guidance across all parameters. We also thank **Dr. A. V. Pavan Kumar**, Professor and Head of the Department of Electrical and Electronics Engineering (HOD/EEE), for his ongoing guidance in all aspects. We sincerely thank **Dr. Rupshree Ozah**, Institute Coordinator of IE(I), and **Dr. Sovit Kumar Pradhan**, our department Coordinator of IE(I), for accepting our request and sponsoring the event through the IE(I) Students' Chapter. Finally, we would like to thank all EEE faculty members, non-teaching staff, and students for their involvement, support, and participation in this event.