About Electronics & ICT Academy at PDPM IIITDM Jabalpur

MeitY, Government of India has instituted Electronics and ICT Academies in the year 2015. In the second phase, the academy at PDPM IIITDM Jabalpur aims at scalable training programmes in niche areas of Electronics and ICT for the development of the required knowledge base, skills and tools to unleash the talent of the Indian population. The Academy is identified by the MeitY as a hub of activities for capacity building through training, internships, research, and consultancy programmes in fundamental and advanced topics in electronics, information and communication technologies.

About ABV-IIITM Gwalior

Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior, is an apex Information Technology and Management Institute, established by the Government of India. The Institute endeavours to carve young minds through quality teaching and develop them as tomorrow's leaders. The Institute's mandate is to create Information Technology enabled Management solutions. The Institute offers various programmes at Masters and Doctoral level. The Institute's activities are aimed at developing amongst students an inquisitive mind and a culture of camaraderie and research.

Faculty Development Programme

On
AI and Data Analytics for Smart Manufacturing and Industrial Automation

The objective of this FDP is to equip participants with a comprehensive understanding of how Artificial Intelligence (AI) and Data Analytics are revolutionizing modern manufacturing through smart technologies and automation. The program aims to build foundational knowledge in data science and AI applications specific to industrial settings, with a focus on predictive maintenance, Industrial IoT, and real-time data collection. Participants will explore techniques such as EDA, data visualization using tools like Power BI and Matplotlib, and AI-based visual inspection methods. By integrating theoretical concepts with real-world case studies, the FDP aspires to enable faculty to effectively teach, research, and innovate in the domain of Industry 4.0 and smart manufacturing.

Who can attend: Faculty, PhD Research Scholars, UG/PG Students, and Industry personnel

Important Dates:

Last Date of Registration: 04 September 2025

FDP Dates: 13-19 September, 2025

Coordinators:

Prof. Gyan Prakash, ABV-IIITM Gwalior
Dr. Amandeep Kaur, ABV-IIITM Gwalior
Dr. Sachin K. Saxena, IIITDM Jabalpur
FDP Secretariat: satyam@iiitm.ac.in
Mobile: 9889456083

Online Faculty Development Programme

on

AI and Data Analytics for Smart Manufacturing and Industrial Automation

13-19 September, 2025

Jointly Organized by

ABV-Indian Institute of Information Technology and Management Gwalior

विश्वजीवनामृतं ज्ञानम्

and

Electronics and ICT Academy IIITDM Jabalpur

An Initiative of the Ministry of Electronics and Information Technology, Government of India

Digital India
Power To Empower

Faculty Development Programme

On

AI and Data Analytics for Smart Manufacturing and Industrial Automation

13-19 September, 2025

Indicative Resource Persons

- Prof. Indrajit Mukherjee, IIT Bombay
- Dr. Ranveer Singh, IIT Indore
- Dr. Sandipan Karmakar, MNIT Jaipur
- Dr. Gunjan Soni, MNIT Jaipur
- Prof. Gyan Prakash, ABV-IIITM Gwalior
- Prof. G. P. Sahu, MNNIT Allahabad
- Dr. Amandeep Kaur, ABV-IIITM Gwalior
- Prof. Prashant Kumar Jain, IIITDM Jabalpur

Coordinators

- Prof. Gyan Prakash, ABV-IIITM Gwalior
- Dr. Amandeep Kaur, ABV-IIITM Gwalior
- Dr. Sachin K. Saxena, IIITDM Jabalpur

Hands-On Sessions

Participants will engage in practical sessions using Python to develop various industrial applications such as predictive maintenance, anomaly detection, exploratory factor analysis, and Industrial IoT data analysis. These sessions will provide real-time experience in applying AI and data analytics to smart manufacturing scenarios.

Course Contents

- Overview of Smart Manufacturing and Industry 4.0
- Fundamentals of Data Science in Manufacturing
- Fundamentals of Artificial Intelligence in Manufacturing
- Predictive Maintenance of Industrial Equipment
- Industrial IoT and Data Collection Techniques
- Exploratory Data Analysis (EDA) for Manufacturing Data
- Human-Robot Collaboration in Industry 4.0 Environments
- Edge AI for Smart Factories
- Federated Learning for Secure Industrial Data Collaboration
- Hands on sessions

Programme Features

- Explore the transformative impact of Machine Learning through real-world industrial and societal applications
- Participate in dynamic, highly interactive sessions combining foundational theory with hands-on experience
- Learn from expert-led demonstrations and engaging practical sessions designed for immediate relevance
- Network with leading researchers and industry professionals from across the globe
- Receive a certificate upon successful completion of the FDP

Registration Details

- Registration link – Please fill out registration using the following link: https://forms.gle/HCN6zqFmDDfPSmou7

- Registration fee: Rs. 500/-

- Seats limited to 60, first come first serve basis

- Last Date for Registration: 04 September 2025

Online Payment Details

- **Internet banking**

Beneficiary Name	ABV-IIITM FDP Account
Bank Name	Bank of India
Branch	Bank of India IIITM Campus
Account No.	945210110009380
IFSC Code	BKID0009462

- **UPI ID: boim-945263969380@boi**

- **QR Code:**