

## About Summer School at PDPM IIITDM Jabalpur

The **1st Summer School on Deep Learning**, organized by PDPM IIITDM Jabalpur, is a month-long immersive program designed to provide **comprehensive understanding of deep learning** and its real-world applications. This program brings together **leading experts, researchers, and industry professionals** to deliver high-quality lectures and hands-on sessions, ensuring a **practical, skill-driven learning experience**.

### 🎯 Who Should Attend?

- ◆ **Students & Researchers** aspiring to build expertise in AI & Deep Learning.
- ◆ **Faculty & Academicians** looking to integrate deep learning into their teaching.
- ◆ **Industry Professionals** keen on leveraging AI for business applications

## About PDPM IIITDM Jabalpur

PDPM IIITDM Jabalpur was established in 2005 with a focus on education and research in IT-enabled Design and Manufacturing. Since its inception, PDPM IIITDM Jabalpur has been playing a vital role in producing quality human resources for contribution to India's mission of inclusive and sustainable growth. The Institute offers undergraduate, postgraduate and PhD programmes in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Design, and PhD programmes in Mathematics, Physics and Literature. Further, the Institute offers an undergraduate programme in Smart Manufacturing. Under IIIT act, the Institute has been declared as an Institute of National Importance. The Institute campus is developed on 250 acres of land close to Dumna Airport, Jabalpur. The Institute is 10 kms from the main railway station and 5.5 kms from Dumna Airport, Jabalpur.

## About Summer School on Deep Learning Program

### 🔥 Key Features:

- ✓ **Comprehensive Curriculum** – Covers foundational to advanced deep learning topics, including CNNs, RNNs, Transformers, GANs, Diffusion Models, and LLMs.
- ✓ **Hands-on Training** – Practical sessions with TensorFlow, PyTorch, and real-world datasets.
- ✓ **Expert-Led Sessions** – Learn from **renowned faculty, researchers, and industry experts**.
- ✓ **Capstone Project** – Apply your knowledge to solve real-world AI challenges.
- ✓ **Certification** – Participants will receive a **certificate from IIITDM Jabalpur** upon successful completion.
- ✓ **Internship & Collaboration** – Paid Internship, mentors, and AI professionals.

### 📅 Important Dates

- **Registration Last Date: 20th March 2025**

### 📅 Chief Patron & Chairperson

- **Director, PDPM IIITDM Jabalpur**

### 🔥 Coordinators

- 👤 **Dr. Rakesh Kumar Sanodiya**
- 👤 **Dr. Ranjeet Kumar Ranjan**

### 🔥 Contact Information

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- 🌐 **Website:** <http://deeplearn-summer school.in/>
- ☎ **Phone:** 8770120278, 9013733204

## 1st Summer School on Deep Learning: Shaping the Future of Artificial Intelligence

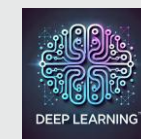


### Date & Duration

- 📅 **19-May to 14-June 2025 (1 month program)**
- 🕒 **5 Days a Week | 2 Hours Theory + 2 Hours Practical per Day (Online Mode)**

### Who Should Attend?

- 👤 **Students** | 👤 **Researchers** |
- 🏢 **Industry Professionals** | 🧑‍🎓 **Faculty**



### Organized By

Computer Science and Engineering



PDPM Indian Institute of Information Technology,  
Design and Manufacturing, Jabalpur  
Dumna Airport Road, Jabalpur 482005

## Deep Learning:

### Shaping the Future of AI

**Duration:** 4 Weeks (5 Days/Week)

**Daily Sessions:** 2 Hours (Theory) + 2 Hours (Practical), Total=80 Hours(Online mode)

#### Distinguished Speakers

This program will be conducted by **leading experts, researchers, and industry professionals**, including:

- ◆ Prof. Sumantra Dutta Roy, IIT Delhi
- ◆ Prof. M. Tanveer, IIT Indore
- ◆ Prof. Aparajita Ojha, IIITDMJ
- ◆ Prof. Pritee Khanna, IIITDMJ
- ◆ Dr. Sriparna Saha, IIT Patna
- ◆ Dr. Rama Krishna Gorthi, IIT Tirupati
- ◆ Dr. Namita Mittal, MNIT Jaipur
- ◆ Dr. Hemant Aggarwal, GE Healthcare
- ◆ Mr. Chinmay Sharma, LinkedIn
- ◆ Dr. Arijit Mondal, IIT Patna
- ◆ Miss. Niharika Ahuja, Google
- ◆ Dr. Debanjan Konar, Samsung
- ◆ Dr. Ravi Ranjan Karn, Accenture
- ◆ Dr. Shiv Ram Dubey, IIIT Allahabad
- ◆ Mr. Jaswin Kasi, Amazon
- ◆ Mr. Prantik Sen, Amazon
- ◆ Mr. Nirakar Padhay, Collinson
- ◆ Dr. Chandra Sekhar, Samsung
- ◆ Dr. Anish Chand Turlapaty, IIITS
- ◆ Dr. Jignesh S. Bhatt, IIITV
- ◆ Dr. Rakesh Kumar Sanodiya, IIITDMJ
- ◆ Dr. Ranjeet Kumar Ranjan, IIITDMJ

- ◆ **Week 1: Foundations of Deep Learning**
  - Introduction to AI & Deep Learning
  - Neural Networks, Backpropagation, and Optimization
  - Mathematics for Deep Learning (Linear Algebra, Probability)
  - Deep Learning Frameworks: TensorFlow & PyTorch
- ◆ **Week 2: Core Deep Learning Architectures**
  - Convolutional Neural Networks (CNNs)
  - Transfer Learning & Pre-trained Models
  - Recurrent Neural Networks (RNNs) & Transformers
  - Natural Language Processing (NLP) & Word Embeddings
- ◆ **Week 3: Advanced Topics & Applications**
  - Generative AI: Autoencoders, GANs, and Diffusion Models
  - Large Language Models (LLMs) & Deployment Strategies
  - Explainable AI (XAI) & Model Interpretability
  - Reinforcement Learning (RL) & Deep Q-Learning
- ◆ **Week 4: Capstone Project & Real-World Applications**
  - AI in Healthcare, Autonomous Systems, and Edge AI, Agriculture, and Remote Sensing
  - Object Detection & Image Segmentation
  - Capstone Project Development & Presentations
  - Smart Agriculture
  - Security and Applications

#### Programme Features

- ✓ Certificate from IIITDM Jabalpur
- ✓ Hands-on Training with Industry Experts
- ✓ Networking & Collaboration Opportunities
- ✓ Real-World AI Project Experience
- ✓ Paid Internship Opportunities
- ✓ Access to Learning Materials

#### Registration Details

To register for the 1st Summer School on Deep Learning, please fill out the registration form using the following link:

[Click here to register](#)

#### Registration Fee

- **Students:** ₹1000 INR
- **Faculty & Others:** ₹1200 INR
- **Industry Professionals:** ₹2000 INR

**Last Date for Registration: 20th March 2025**

#### Online Payment Details

- **Mode of Payment:** Internet Banking
- **Beneficiary Name:** PDPM IIITDM Jabalpur
- **Bank Name:** INDIAN BANK
- **A/C No.:** 50018692852
- **IFSC Code:** IDIB000M694
- **UPI ID:** iiitdmj@indianbk

