



# Online FDP on Deep Learning

25<sup>th</sup> June– 02<sup>nd</sup> July 2025



## Chairman, EICT Academy & Director MNIT Jaipur

Prof. Narayana Prasad Padhy

## Chief Investigator, EICT Academy

Prof. Vineet Sahula, ECE

## Coordinator, EICT Academy

Dr. Satyasai Jagannath Nanda, ECE

## Co- Chief Investigators, EICT Academy

Prof. Lava Bhargava, ECE

Prof. Pilli Emmanuel Shubhakar, CSE

Dr. Ravi Kumar Maddila, ECE

## Objective (Electronics & ICT Academy-Phase II)

1) To conduct specialized FDPs for faculty/mentor training in line with the vision of MeitY by promoting emerging areas of technology and other high-priority areas that are pillars of both the "Make in India" and the "Digital India" programs.

2) To promote synergy and collaboration with industry, academia, universities and other institutions of learning, especially in emerging technology areas.

3) To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESDM sector, including MeitY Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India AI; National Programme on AI, Production Linked Incentive Scheme for IT Hardware & Large-Scale Electronics Manufacturing; EMC; SPECS; Chips to System (C2S); etc.

4) To promote standardization of FDPs through Joint Faculty Development Programmes.

5) To support the vision of the National Education Policy (NEP 2020), which mandates that Indian educators go through at least 50 hours in professional development programmes per year.

6) To design, develop & deliver specialised FDPs on emerging technologies/ niche areas/ specialised modules for specific research areas for Faculty in Higher Education Institutions (HEI), besides FDPs on multi-disciplinary areas connected with ICT tools and technologies and other digital hybrid domains, covering a wide spectrum of engineering and non-engineering colleges, polytechnics, ITIs, and PGT educators.

An intensive 40 Hour Faculty Development Programme in online mode is being organized for faculty of engineering and technological institutions. It is also open to persons from industry and doctoral students of Indian organizations. The main theme of training program will be oriented around exploring the state of the art methods for Machine Learning.

## Experts/Speakers-

1) Dr. Ram Prasad Padhy, IIT	9) Dr. Satyendra Singh Chouhan, MNIT
2) Prof. Rajesh Kumar, University of Johannesburg, South Africa	10) Dr. Mahipal Jadeja, MNIT Jaipur
3) Dr. Santosh Kumar Vipparthi, IIT	11) Dr. Gautam Kumar, NIT Delhi
4) Dr. Sonam Misra, IBM Research	12) Dr. Abhinav Kumar, MNNIT Allahabad
5) Dr. Swarup Ranjan Behera,	13) Dr. Surender Hans, MNIT Jaipur
6) Dr. Neeta Nain, MNIT Jaipur	14) Dr. Vikash Kumar, MNIT Jaipur
7) Dr. Ashish Tripathi, MNIT Jaipur	15) Dr. Irshed Hussain, Siksha Anusandhan, Bhubaneswar
8) Dr. Deepak Ranjan Nayak, MNIT	16) Mr. Rohit Shukla, Head AI Division,

## Programme Modules:

Module 1: Introduction to Perceptron and Linear Separability, MLP and Backpropagation, Activation and Loss Functions, RBF Networks, CNNs,

Module 2: AlexNet, LeNet, VGG, ResNet, DenseNet, Vanishing Gradients, Sequential Modeling: RNN, LSTM, GRU, RBMs, Variational Autoencoders.

Module 3: GANs, GAN Variants, Segmentation Models, Zero-Shot Learning & Segmentation, Spiking Neural Networks, Transformers & Attention Mechanism.

Module 4: BERT and GPT Overview, BERT and GPT, NLP, Explainable AI (XAI), DL for Autonomous Vehicles, Applications in Security, Healthcare and Agriculture

Simulation/ Labrotary : Python : Building a Neural Network from Scratch, Building a CNN from Scratch, Building CNN Variants through Transfer Learning, Building a Generative Model, Implementing SNN, Transformer Model

## Programme Coordinators:

Dr. Vikash Kumar

[fdp.academy@mnit.ac.in](mailto:fdp.academy@mnit.ac.in)

8442862900 (M)

Dr. Surender Hans

9911543993 (M)

Register on line at - <http://www.mnit.ac.in/eict/> or scan the following QR Code



**Registration fee** : Academia (Faculty members/Students): Rs. 500/-

Working professionals/ Industry / Others: Rs.1500 /

(A) Fee once paid will not be refunded back.

(B) The fee covers online participation in the programme, tutorial notes and examination, certification charges.

(C) The organizers should receive the registration amount through online payment gateway provided at the registration portal.

(D) For modules details, see separate sheet attached.

**MNIT Jaipur** one of the oldest NITs, the institute has a rich heritage of sixty years producing world class engineers, managers, architects and scientists. Ranked 43rd nationally in the NIRF ranking-2024 (Engineering), the institute offers learning opportunities for undergraduate, postgraduate students, and researchers in various domains. Having a lush green campus of over 317 acres within the heart of the pink city, close to Jaipur International Airport, the campus offers a safe and lively environment. A world class teaching infrastructure, state-of-art laboratories welcome you at the campus. The institute has a vision to impart education of international standards and conduct research at the cutting edge of technology.