



Online FDP on Machine Learning- Basic to Beyond

01st – 10th May 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 Hybrid 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) Prof. Rajesh Kumar, Department of Human Anatomy and Physiology, University of Johannesburg, South Africa.
- 2) Dr. Chandresh, Department of Computer Sci. & Engineering, IIT Indore.
- 3) Dr. Shelly Sachdeva, Dept. of Computer Sci. & Engineering, NIT Delhi.
- 4) Dr Chander Prakash, Department of Computer Engineering, SVNIT Surat.
- 5) Dr Ankit Vijayvergiya Dublin City University, Dublin 9, Ireland.
- 6) Dr. Anup Nandy, Department of Computer Sci. & Engineering, NIT Rourkela.
- 7) Dr. Rishav Singh, Department of Computer Sci. & Engineering, IIT Patna.
- 8) Dr. Yogesh Kumar Meena, Department of Computer Sci. & Engineering, IIT Gandhinagar.
- 9) Dr. Rahul Kala, Department of Information Technology, IIITM Gwalior.
- 10) Dr. Surender Hans, Dept. of Electrical Engineering, MNIT Jaipur.

Programme Modules:

Module 1: Simple Linear Regression (LR), Multi LR, Poly Regression, Regularization: Ridge, Lasso, Elastic-Net. Regression Metrics.

Module 2: Entropy, Information Gain, Support Vector Machines, Ensemble Methods, Bagging, Boosting, Random Forest, Decision Tree.

Module 3: Classification Metrics, Gradient Descent (GR), Stochastic GR, Mini- Batch GR, Bias-Variance Trade-off, KNN, PCA, Inferential Statistics.

Module 4: K-means, Gradient Boosting, Stacking & Blending, KNN, Naïve Bayes Classifier, SVM, Feature Selection, Hypothesis Testing.

Simulation/ Labrotary : Python : Linear & Logistic Regression, PCA, SVM, KNN, K-means, Decision Tree.

Programme Coordinator:

Dr. Surender Hans

surender.ee@mnit.ac.in

9911543993 (M)

Registration:

Registration is open to faculty, industry persons, doctoral, postgraduate and graduate students. Participants will be admitted on first-come first-served basis.

Register on line at - <http://www.mnit.ac.in/eict/>

Certification Fee: Every participant: Rs. 500/-

Registration fee: Academic (faculty): Nil/-, Industry/student/Others: 1000/-

(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.

→ For any other query, email us at fdp.academy@mnit.ac.in

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.