Organized by Electronics & ICT Academy



Hybrid Programme

Smart Healthcare Technologies: Challenges & Oppertunities

Faculty Development Programme Electronics & ICT Academy under aegis of



MNIT Jaipur

22 September- 04 October, 2025

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nttp://www.mnit.ac.in/eict

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** 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 sector, ESDM including Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India Al; National Programme on Al, 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 Hours Training Programme in online mode is being organized for faculty and doctoral students of engineering and technological institutions. It is also open to working professionals from industry/organizations. The main theme of training program will be oriented around exploring the state of the art methods for smart healthcare and their various applications. The programme will be run during 5.00 PM-8.00 PM on Monday-Friday and 10.00 AM-4.00 PM on Saturday.

Experts/Speakers-

- 1) Prof. Vinod Kumar, former Professor & Deputy Director IIT Roorkee
- 2) Dr. Kuldeep Singh, Associate Professor, MNIT Jaipur
- 3) Dr. Deepak Ranjan Naik, Associate Professor, MNIT Jaipur
- 4) Dr. Amit M Joshi, Associate Professor, MNIT Jaipur

Programme Modules:

Module 1: Physiological Signal Processing: Basics of ECG Signal, Electrical activity of hear, EEG Signal and acquisition, EMG Signal Propagation

Module 2: Wearable Device & Healthcare Technologies: Health monitoring, Role of IoT in Healthcare, Electronics Health Records, security & Privacy

Module 3: Machine Learning for Health information: Basics of Python programming with ML basics, ML for Healthcare, Regression, Classification, **Unsupervised Learning for Health data**

Module 4: Deep learning for healthcare: Basics of DL, MLP, Neural Network, MLP, CNN & RNN for digital health, Forward and Backward prolongations

Module 5: Smart Healthcare Applications: Diabetic detection, Robotic arm & hand gesture recognition, mental order disorder, Medical Image analysis

Principal Coordinator:

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Registration:

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

(http://online.mnit.ac.in/eict/)

Certification Fee:

From Academia (faculty/Students): Rs. 500/-Working professionals, Industry, research/technical staff & Others: 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 mode-NEFT/UPI, provided at the registration portal.
- (D) Detailed schedule will be shared after receiving registration form.
- → 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.