Jointly Organized by Electronics & ICT Academies



IIITDMJ, MNITJ, IITR, NITP, IITG http://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 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 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 multidisciplinary 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.

Online Programme

on Biometrics Security in the Generative AI Era

1st - 12th Mar 2025

Faculty Development Programme Electronics & ICT Academy under aegis of



meity.gov.in/content/schemes-projects

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 **Biometrics Security in the Generative Al Era**. **The programme will be run during 2;30-4:30 PM and 6 -8 PM** <u>daily</u>.

Experts/Speakers-

- 1) Prof. Phalguni Gupta, Former Professor IIT Kanpur
- 2) Prof. Pritee Khanna, IIITDM Jabalpur
- 3) Prof. Surya Prakash, IIT Indore
- 4) Dr. Kiran Raja, Norwegian University of Science and Technology
- 5) Prof. Vilaylaxmi, MNIT Jaipur
- 6) Dr. Sambit Bakshi, NIT Rourkela
- 7) Dr. Shiv Ram Dubey, IIIT Allahabad
- 8) Dr. Harkeerat Kaur, IIT Jammu
- 9) Dr. Avantika Singh, IIIT Naya Raipur

Programme Modules:

Module 1. Introduction to Biometric Systems

Introduction to Biometric Systems, Biometric System Evaluation, Machine Learning and Deep Learning Models for Biometric Recognition

Module 2. Generative AI and Its Impact on Biometrics

Introduction to Generative AI, Variational Autoencoders, Generative Adversarial Networks (GANs), Attack Landscape on Biometric Recognition, Deepfake Generation and Detection

Module 3. Enhancing Biometric Security Using AI

Biometric Template Protection Techniques, Countermeasures against Attacks using Al, Vision Transformers for Biometric Recognition, Explainable Al and Biometric Signal Processing

Module 4: Regulatory, Ethical, and Privacy Challenges

Biometric Systems - Breaches and Best Practices, Privacy and Security in Generative Al Biometrics, Future Trends and Research Directions

Hands-on sessions on Biometric Authentication System, attack detection, and

Deepfake Generation and Detection

Joint-Principal Coordinator (MNIT Jaipur):

Dr. Meenakshi Tripathi <u>fdp.academy@mnit.ac.in</u>

954 965 4393 (M)

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 at-



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

Certification Fee: Academic (faculty/Students): Rs. 500/-

Working professionals, Industry/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, academy@mnit.ac.in, <a href="mailto:academy@mnit.academy@mni

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 explanate