Organized by
Electronics & ICT Academy

MNIT Jaipur
http://www.mnit.ac.in/eict
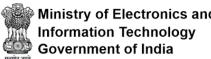
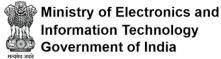# Online Programme
on
Modern Computer Vision

September 08– 19, 2025

Faculty Development Programme
Electronics & ICT Academy under aegis of

Ministry of Electronics and Information Technology Government of India

Ministry of Electronics & Information Technology
Government of India
meity.gov.in/content/schemes-projects

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 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 FDP aims to provide a platform for participants to enhance their knowledge and skills in both the theoretical and practical aspects of modern computer vision techniques. **The program is scheduled to take place daily from 4:00-8:00 PM.**

Experts/Speakers-

1) Prof. C. Chandra Sekhar, IIT Madras	11) Dr. Dwarikanath Mahapatra, IIAI, UAE
2) Prof. M K Bhuyan, IIT Guwahati	12) Prof. Tapan Kumar Gandhi, IIT Delhi
3) Prof. Abhinav Dhall, Monash University	13) Prof. Surya Prakash, IIT Indore
4) Prof. Sumantra Dutta Roy, IIT Delhi	14) Prof. A S. Chowdhury, Jadavpur Univ.
5) Prof. Biplab Banerjee, IIT Bombay	15) Prof. Badri N Subudhi, IIT Jammu
6) Prof. Debi P Dogra, IIT Bhubaneswar	16) Prof. Aditya Nigam, IIT Mandi
7) Dr. Badri N Patro, Microsoft Research	17) Prof. Ratnakar Dash, NIT Rourkela
8) Dr.Ram Prasad Padhy, IIT Bhubaneswar	18) Dr. Deepak Panda, Microsoft
9) Mr. Sai K Dwivedi, MPI-IS/Meta Germany	19) Dr. Ashish K Tripathi, MNIT Jaipur
10) Prof, Neeta Nain, MNIT Jaipur	20) Dr. Deepak R Nayak, MNIT Jaipur
Other experts from IIT, NIT, IIIT, EICT academies and top industries/labs	

Programme Modules:

Module 1: Introduction to Computer Vision: Image Formation, Linear Filtering, Correlation, Convolution, Image Enhancement, Filtering in Spatial and Frequency Domain
Module 2: Image Descriptors and Features: Edge detection, Overview of Feature Detectors and Feature Descriptors (LBP, GLCM, SIFT, SURF, etc.)
Module 3: Deep Learning for CV : Introduction to deep learning and feed-forward neural networks, MLP, Backpropagation, CNN, Evolution of CNN models, CNNs for Recognition, Detection, and Segmentation tasks, RNNs, LSTMs, Video Understanding, Action Recognition
Module 4: Current Trends in CV: Attention models and Vision Transformers, Deep Generative Models: GANs, VAE, and Diffusion Models, Vision-Language Models, Contrastive Learning, CLIP, Self Supervised Learning, Few-shot and Zero-shot Learning, 3D Vision, HDR in Image/Video Translation, Deepfakes, Medical Image/Video Analysis, Foundation Models, etc.
Simulation/ Labrotary : Python Libraries : OpenCV, TensorFlow, Pytorch

Programme Coordinator:

Dr. Deepak Ranjan Nayak
Dr. Ashish Kumar Tripathi

fdp.academy@mnit.ac.in

9861352739 (M)
9999865120 (M)

Registration:
Registration is open to faculty, working professionals, industry persons, doctoral, postgraduate and graduate students from India and rest of the world. Participants will be admitted on first-come first-served basis. Register online at–(http://online.mnit.ac.in/eict/)

Registration Fee:

Mode of programme	Academia (faculty/Students): India/SAARC/Africa	Others: India/SAARC/Africa	Rest of the world
Online	Rs. 500/-	Rs. 1500/-	US $ 60/-
Classroom	Rs. 2000/-	Rs. 4000/-	--

(A) Fee once paid will not be refunded back.
(B) The fee covers online participation in the programme, tutorial notes and examination, certification charges etc.
(C) The registration amount may be paid through online mode-
NEFT/UPI/Cards/SWIFT, provided at the registration portal.
 (D) Detailed schedule will be shared after receiving registration form.
 → For queries, 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.