



## Mastering Generative AI: From Basics to Advanced Applications

June 09- June 13, 2025



### Chairman, EICT Academy & Director MNIT Jaipur

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### 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. Generative AI is transforming industries by enabling machines to generate text, images, audio, and video content. This 5-day intensive Faculty Development Program aims to equip educators, researchers, and technologists with both foundational knowledge and hands-on experience in Generative AI. Covering models like Autoencoders, GANs, Transformers, and LLMs (such as GPT), the FDP provides a blend of theory, practical labs, and brainstorming sessions. This FDP will be conducted online starting from **June 09 to June 13, 2025**.

### Programme Modules:

**Module 1: Foundations of Generative AI and Deep Learning:** Intro to Generative AI and its Applications, Deep Learning Basics: Neural Nets, Loss Functions, Hands-on: TensorFlow/PyTorch Basics, Brainstorming Session: GenAI in Education and Research.

**Module 2: Generative Models- Autoencoders and GANs:** Introduction to Autoencoders and VAEs, GANs and Their Variants, Hands-on: Building VAEs & GANs.

**Module 3: Language Generation - LLMs, GPT, and Prompt Engineering:** Transformers and Language Models, GPT, BERT, LLaMA - Architecture and Use Cases, Hands-on: Text Generation using HuggingFace/OpenAI, Prompt Engineering and Challenge Activities.

**Module 4: Multimodal and Advanced GenAI Applications:** Image Generation with DALL-E, Stable Diffusion, Audio/Video Generation and Use Cases, Hands-on: Building Multimodal Applications.

**Module 5: Deployment, Industry Applications:** GenAI in Industry - Case Studies and Trends, Deploying GenAI Apps using Streamlit/Gradio

### Experts/Speakers-

Experts will be from Academia (NITs/IIITs or CFTIs) and Top industries.

### 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 at-

[\(http://online.mnit.ac.in/eict/\)](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](mailto:fdp.academy@mnit.ac.in) , [academy@mnit.ac.in](mailto:academy@mnit.ac.in)