

# **Electronics & ICT Academy IIT Roorkee**



An Initiative of **Ministry of Electronics** & Information Technology (MeitY) Government of India

A Faculty Development Program on

# **Empowering Educators with Generative AI**

In association with

**IIIT Nagpur** 

July 01<sup>st</sup> – July 10<sup>th</sup>, 2025

Timings: 10:00 AM - 04:00 PM Register Before: June 25<sup>th</sup>, 2025



#### Venue: Hybrid Mode at IIIT Nagpur

#### **Objectives of the Course**

- To introduce foundational concepts of Generative AI, including LLMs and diffusion models.
- To explore the evolution from rule-based systems to deep generative networks.
- To demonstrate hands-on use of tools like GPT-3, Stable Diffusion, and LangChain.
- To examine text vs image generation methods and their educational relevance.
- To provide practical skills in prompt engineering and model fine-tuning.
- To promote responsible and ethical GenAI use in academia.
- To enable faculty to create GenAI-powered teaching and content tools.





# Why this course?

Generative AI is reshaping how we teach, learn, and create. With advancements in language and image models like GPT-3 and Stable Diffusion, educators must adapt to new paradigms of content creation, interaction, and assessment. This course empowers faculty to understand, experiment, and ethically apply these technologies through a blend of theory and hands-on labs. By the end of this FDP, participants will be equipped to incorporate GenAI tools into curricula, guide students in AIbased projects, and lead innovation in techenabled education.

### Prerequisites

No experience is required, but fundamental knowledge of any programming language would be helpful.

# Experts from Academia/Industry

#### Who Should Register?

Any Interested Faculty/PhD-Scholars UG/PG/ & Industry Persons can register

#### **Registration Fee**

Fees: ₹ 250/- Faculty/Research Scholar/ Students ₹ 500/- Industry/Others Note: Refund will be done in case of course cancellation only, with in 20 working days

### FDP Kits & Refreshment will be provided

#### How to make Payment

Please make the payment first using the below link upload the payment receipt when filling out the Google registration form

### https://eict.iitr.ac.in/instruction-for-payment/

### EICT Course Code: EICTIITR-FDP-5H6-08

### **Registration Link**

# https://forms.gle/RCB4qT5uwCaBjKnQ9



Scan QR for registration

**Register before:** June 25<sup>th</sup>, 2025

### Click on icon to follow us on:



#### **Course Outcomes**

- Understand foundational and advanced concepts of Generative AI
- Gain proficiency in using Hugging Face, LangChain, and Stable Diffusion
- Design educational content using GenAI tools
- Perform hands-on tasks in text and image generation
- Develop GenAI apps or projects for academic applications
- Address ethical and pedagogical implications of AI integration
- Confidently mentor students and lead classroom innovation using GenAI.

#### **Focus Areas**

- Large Language Models (BERT, GPT, LLaMA)
- Diffusion models for image generation (e.g., Stable Diffusion)
- Prompt engineering for educational tasks
- LangChain for conversational and document-based AI
- Retrieval-Augmented Generation (RAG) techniques
- Fine-tuning text/image models using open-source tools
- Ethical, pedagogical, and assessment applications in education

### **Course Features**

- 40 Hours of Lectures, hands-on, and Pedagogy/Industry sessions.
- Lectures from Expert Speakers, Hands-on from industry/Academia experts.
- Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee

This certificate can be considered in alignment with other Quality Improvement Programs (QIP) as well as NBA and NAAC for recognition/credit.

### Patrons

- Shri Deepak Ghaisas, Chairman, BOG, IIIT Nagpur
- Dr. Prem Lal Patel, Director, IIIT Nagpur
- Shri K. N. Dakhale, Registrar

### Conevnors

- Dr. Tausif Diwan, Associate Dean, **IIIT Nagpur**
- Dr. Nishant Ansari, HOD CSE, IIIT Nagpur

# **Principal Investigator**

• Prof. Sanjeev Manhas, ECE Department, IIT Roorkee

### **Course Coordinators**

- Prof. Sanjeev Manhas, IIT Roorkee
- Dr. Swati Hira, IIIT Nagpur
- Dr. Vaundhara Rathod, IIT Nagpur
- Dr. Mangesh Kose, IIIT Nagpur

# Reach Us:

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