

Electronics & ICT Academy IIT Roorkee



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

A Faculty Development Program on

Generative AI in Research Practice: Empowering Faculty with Hands-on Skills

In association with

AI Dept. Anurag University

June 16th – June 21nd, 2025

Register Before: Jun 14, 2025



Venue: Hybrid Mode at: AI Dept., Anurag University

Objectives of the Course

- Introduce generative AI concepts with a focus on educational and research applications
- Develop foundational understanding of AI models including GANs and VAEs
- Explore prompt engineering for text generation tasks
- Examine ethics, bias, and variation in generative AI
- Demonstrate diffusion models for image synthesis
- Discuss application of LLMs in governance, health, and academia
- Empower faculty to integrate generative AI in classroom and research practices





Why this course?

As generative AI rapidly evolves, it is vital for educators and researchers to harness its potential responsibly. This course provides a deep dive into the architectures, ethical dimensions, and practical applications of models like GANs, VAEs, and LLMs. Designed specifically for faculty, it emphasizes hands-on learning and the integration of generative AI tools in academia. By bridging the gap between theory and practice, the course empowers educators to innovate in research, teaching, and policy using cutting-edge AI technologies.

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-5H6-11

Registration Link

https://forms.gle/U8kABpXTkhp61NEU8



in

Scan QR for registration

Register before: Jun 14, 2025

Click on icon to follow us on:

Course Outcomes

- Understand the fundamentals of generative AI and its architectures
- Analyze and apply LLMs in text generation
- Use prompt engineering effectively in research tasks
- Identify and mitigate bias in generative models
- Gain proficiency in image synthesis using diffusion models
- Translate theoretical knowledge to classroom and research projects
- Stay informed on future trends in generative AI technologies

Focus Areas

- Basics of AI and relevance in education
- Deep learning for generative models
- GANs, VAEs, and prompt engineering
- Ethical considerations and bias mitigation
- Large Language Models (LLMs): architecture and training
- Diffusion models and image synthesis
- Real-world applications in governance, healthcare, and Indian context

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

Who may benifits

- Academic Faculty and Students(UG/PG)
- Government Officials.
- Working Professionals in the Industry and Startups.
- Research Scientists and Technical Staff.

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

Principal Investigator

• Prof. Sanjeev Manhas ECE Department, IIT Roorkee

Course Coordinators

- Prof. Sanjeev Manhas, IIT Roorkee
- Dr. A Mallikarjuna Reddy, Anurag University
- Dr. R. Sravanth Kumar, Anurag University

Reach Us:

- M.No.: 8112766397
- Landline No.: +91-1332286457
- Email: eict@iitr.ac.in